

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: P166480

Luminaire Tested: **22ALNG-LD4-25-UNV-L840-CD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P166480
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22ALNG-LD4-25-UNV-L840-CD1
Description: METALUX ARCLINE 2X2 LED FIXTURE
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25824)
Light Source: -
Ballast/Driver: -

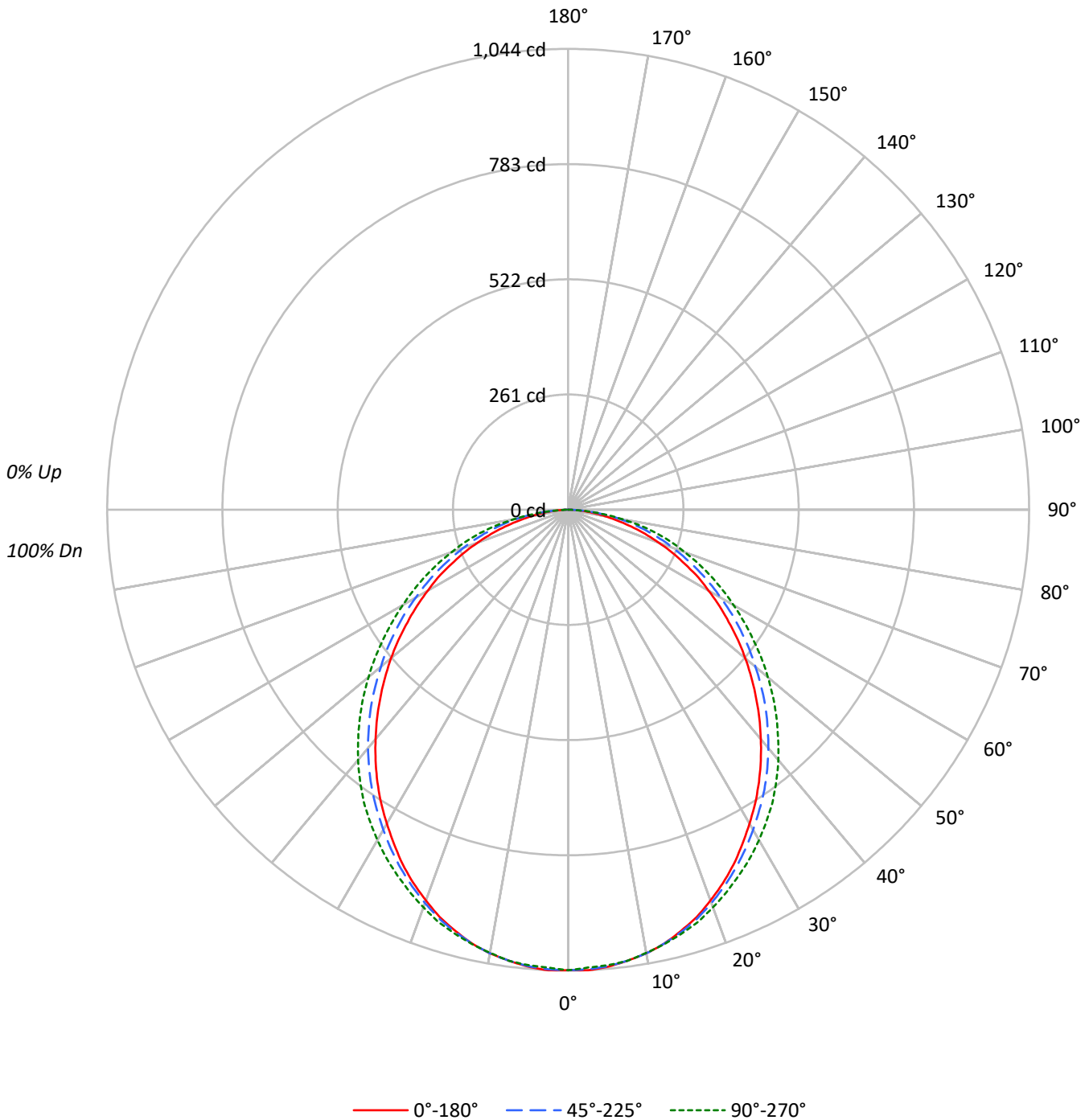
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2755.7 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.23 / 1.32
Luminous Opening: Rectangular (W 1.92' x L: 1.92' x H: 0')
CIE Type: Direct

Input Watts (W): 24.7
Input Voltage (V): NR
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





TEST NUMBER: P166480

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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 | 98 | 94 | 91 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 78 | 96 | 89 | 83 | 77 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 75 | 72 | 70 |
| 3 | 90 | 80 | 72 | 65 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 73 | 67 | 62 | 70 | 65 | 61 | 59 |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 61 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 63 | 57 | 53 | 51 |
| 5 | 76 | 63 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 46 | 44 |
| 6 | 71 | 57 | 48 | 42 | 69 | 56 | 48 | 42 | 55 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 41 | 39 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 |
| 8 | 61 | 48 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 57 | 44 | 35 | 30 | 56 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 29 | 28 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3057 | 3057 | 3057 |
| 5° | 3057 | 3054 | 3046 |
| 10° | 3036 | 3036 | 3033 |
| 15° | 2996 | 3004 | 3016 |
| 20° | 2938 | 2958 | 2989 |
| 25° | 2867 | 2900 | 2957 |
| 30° | 2778 | 2834 | 2924 |
| 35° | 2694 | 2770 | 2888 |
| 40° | 2596 | 2697 | 2832 |
| 45° | 2493 | 2618 | 2766 |
| 50° | 2386 | 2524 | 2691 |
| 55° | 2268 | 2436 | 2610 |
| 60° | 2151 | 2336 | 2536 |
| 65° | 2020 | 2248 | 2475 |
| 70° | 1869 | 2161 | 2399 |
| 75° | 1671 | 2085 | 2357 |
| 80° | 1426 | 1979 | 2108 |
| 85° | 1143 | 1610 | 1570 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 98.5 | 3.6 |
| 10°-20° | 279.3 | 10.1 |
| 20°-30° | 413.9 | 15.0 |
| 30°-40° | 485.8 | 17.6 |
| 40°-50° | 487.9 | 17.7 |
| 50°-60° | 426.5 | 15.5 |
| 60°-70° | 320.6 | 11.6 |
| 70°-80° | 190.8 | 6.9 |
| 80°-90° | 52.3 | 1.9 |
| 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° | 791.7 | 28.7 |
| 0°-40° | 1277.6 | 46.4 |
| 0°-60° | 2191.9 | 79.5 |
| 0°-90° | 2755.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2755.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1043 | 1043 | 1043 | 1043 | 1043 | |
| 5° | 1040 | 1040 | 1038 | 1037 | 1036 | 99 |
| 15° | 988 | 989 | 990 | 994 | 994 | 278 |
| 25° | 887 | 888 | 897 | 910 | 914 | 408 |
| 35° | 753 | 758 | 774 | 797 | 807 | 471 |
| 45° | 602 | 609 | 632 | 656 | 667 | 464 |
| 55° | 444 | 453 | 477 | 500 | 511 | 398 |
| 65° | 291 | 300 | 324 | 344 | 357 | 290 |
| 75° | 148 | 160 | 184 | 201 | 208 | 157 |
| 85° | 34 | 42 | 48 | 48 | 47 | 41 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P166480

CATALOG NUMBER: 22ALNG-LD4-25-UNV-L840-CD1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1043.3 | 1043.3 | 1043.3 | 1043.3 | 1043.3 |
| 2.5° | 1044.5 | 1043.3 | 1042.0 | 1039.5 | 1038.2 |
| 5° | 1039.5 | 1039.5 | 1038.2 | 1037.0 | 1035.7 |
| 7.5° | 1030.6 | 1031.9 | 1030.6 | 1030.6 | 1030.6 |
| 10° | 1020.5 | 1021.8 | 1020.5 | 1020.5 | 1019.3 |
| 12.5° | 1006.6 | 1006.6 | 1006.6 | 1007.9 | 1007.9 |
| 15° | 987.8 | 989.0 | 990.3 | 994.1 | 994.1 |
| 17.5° | 967.5 | 967.5 | 971.3 | 977.6 | 978.9 |
| 20° | 942.3 | 943.6 | 948.7 | 956.2 | 958.7 |
| 22.5° | 915.8 | 917.1 | 923.4 | 933.5 | 937.3 |
| 25° | 886.8 | 888.1 | 896.9 | 909.6 | 914.5 |
| 27.5° | 854.0 | 856.6 | 867.9 | 884.3 | 890.6 |
| 30° | 821.2 | 825.0 | 837.6 | 856.6 | 864.2 |
| 32.5° | 788.4 | 792.2 | 806.1 | 827.5 | 836.3 |
| 35° | 753.1 | 758.2 | 774.5 | 797.3 | 807.4 |
| 37.5° | 716.6 | 721.6 | 740.5 | 764.5 | 774.5 |
| 40° | 678.6 | 684.9 | 705.2 | 729.1 | 740.5 |
| 42.5° | 640.8 | 647.1 | 668.6 | 692.5 | 703.9 |
| 45° | 601.7 | 609.3 | 631.9 | 656.0 | 667.4 |
| 47.5° | 562.6 | 570.2 | 592.9 | 616.9 | 629.5 |
| 50° | 523.5 | 531.1 | 553.8 | 577.8 | 590.3 |
| 52.5° | 484.4 | 491.9 | 515.9 | 538.6 | 551.2 |
| 55° | 444.0 | 452.8 | 476.9 | 499.5 | 510.9 |
| 57.5° | 406.2 | 413.7 | 439.0 | 460.4 | 471.8 |
| 60° | 367.1 | 375.9 | 398.6 | 420.1 | 432.7 |
| 62.5° | 333.0 | 336.8 | 362.0 | 382.2 | 394.9 |
| 65° | 291.4 | 300.3 | 324.2 | 344.4 | 357.0 |
| 67.5° | 256.1 | 263.6 | 287.6 | 309.0 | 319.1 |
| 70° | 218.2 | 228.3 | 252.3 | 271.2 | 280.0 |
| 72.5° | 182.9 | 193.0 | 218.2 | 237.2 | 246.0 |
| 75° | 147.6 | 160.3 | 184.2 | 200.6 | 208.2 |
| 77.5° | 114.8 | 128.6 | 150.1 | 165.2 | 169.0 |
| 80° | 84.5 | 97.1 | 117.3 | 123.6 | 124.9 |
| 82.5° | 58.1 | 69.4 | 82.0 | 84.5 | 84.5 |
| 85° | 34.0 | 41.6 | 47.9 | 47.9 | 46.7 |
| 87.5° | 15.2 | 17.7 | 16.4 | 15.2 | 12.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)