

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: P#

Luminaire Tested: **22CZ-LD5-39SE-SQP-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39SE-SQP-UNV-L850-CD1-U
Description:

Light Source: -
Ballast/Driver: -

Summary

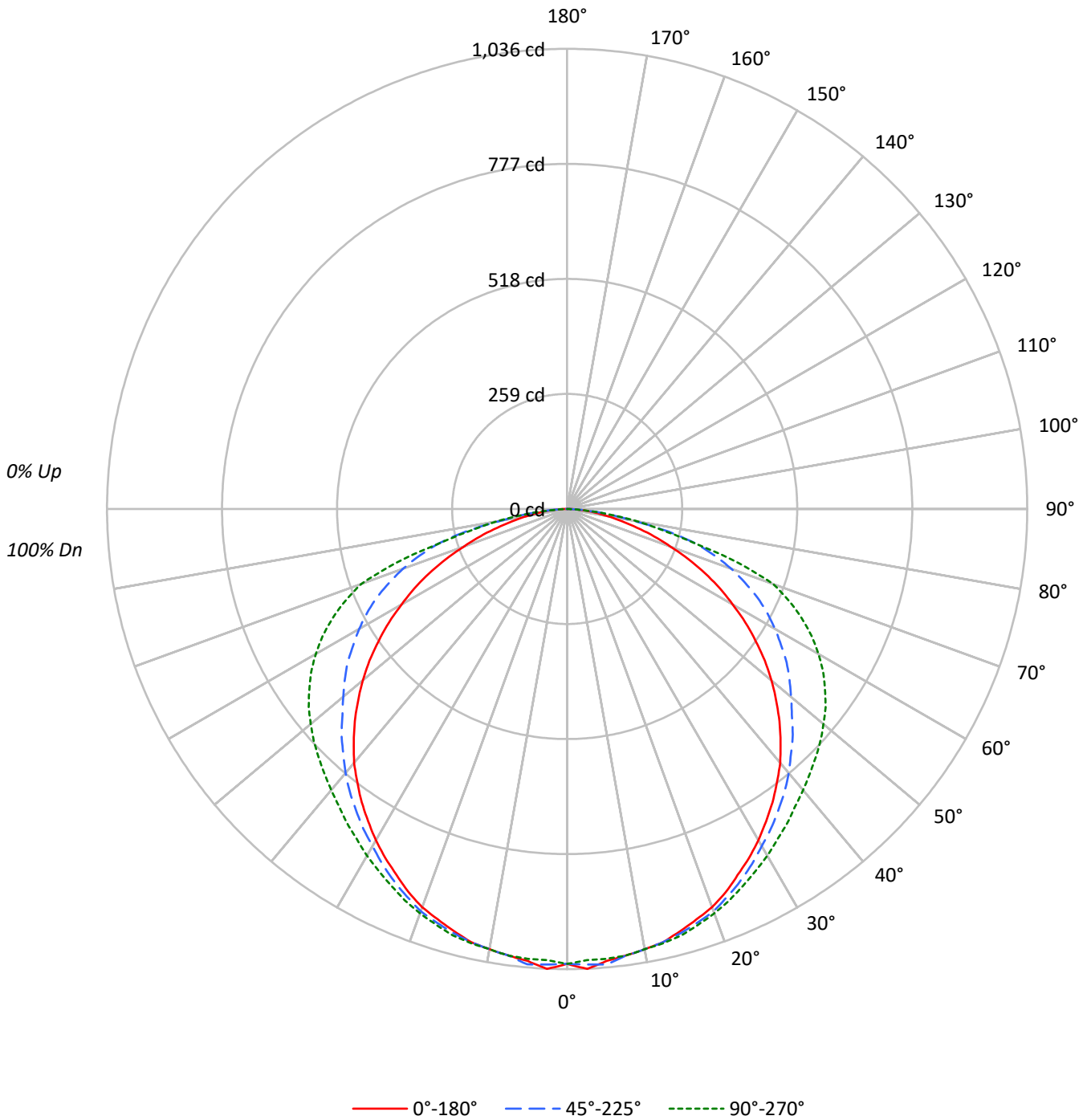
Lumens per Lamp: N/A
Luminaire Lumens: 3223.8 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')
CIE Type: Direct

Input Watts (W): 34.88
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: P#

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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 | 99 | 95 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 83 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | 80 | 76 | 71 | 77 | 73 | 70 | 68 |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 70 | 64 | 59 | 68 | 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 | 52 | 45 | 72 | 60 | 51 | 44 | 58 | 50 | 44 | 56 | 49 | 43 | 54 | 48 | 43 | 41 |
| 6 | 68 | 55 | 45 | 39 | 66 | 54 | 45 | 39 | 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° | 2756 | 2756 | 2756 |
| 5° | 2747 | 2763 | 2734 |
| 10° | 2726 | 2716 | 2726 |
| 15° | 2705 | 2704 | 2732 |
| 20° | 2683 | 2691 | 2725 |
| 25° | 2637 | 2655 | 2717 |
| 30° | 2601 | 2616 | 2722 |
| 35° | 2559 | 2594 | 2741 |
| 40° | 2515 | 2574 | 2785 |
| 45° | 2450 | 2554 | 2867 |
| 50° | 2374 | 2542 | 2977 |
| 55° | 2269 | 2571 | 3102 |
| 60° | 2133 | 2593 | 3236 |
| 65° | 1973 | 2616 | 3354 |
| 70° | 1715 | 2590 | 3412 |
| 75° | 1426 | 2451 | 2588 |
| 80° | 1118 | 1634 | 1934 |
| 85° | 788 | 855 | 886 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 97.2 | 3.0 |
| 10°-20° | 279.2 | 8.7 |
| 20°-30° | 425.5 | 13.2 |
| 30°-40° | 520.6 | 16.1 |
| 40°-50° | 560.2 | 17.4 |
| 50°-60° | 542.6 | 16.8 |
| 60°-70° | 459.6 | 14.3 |
| 70°-80° | 277.8 | 8.6 |
| 80°-90° | 61.0 | 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° | 801.9 | 24.9 |
| 0°-40° | 1322.5 | 41.0 |
| 0°-60° | 2425.3 | 75.2 |
| 0°-90° | 3223.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3223.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1024 | 1024 | 1024 | 1024 | 1024 | |
| 5° | 1022 | 1022 | 1029 | 1024 | 1016 | 97 |
| 15° | 984 | 986 | 989 | 991 | 994 | 278 |
| 25° | 909 | 914 | 924 | 931 | 936 | 420 |
| 35° | 806 | 811 | 829 | 851 | 864 | 504 |
| 45° | 676 | 688 | 718 | 764 | 791 | 521 |
| 55° | 518 | 541 | 603 | 674 | 708 | 463 |
| 65° | 343 | 380 | 473 | 548 | 583 | 338 |
| 75° | 163 | 220 | 298 | 303 | 295 | 175 |
| 85° | 40 | 48 | 50 | 48 | 45 | 45 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: 22CZ-LD5-39SE-SQP-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1024.0 | 1024.0 | 1024.0 | 1024.0 | 1024.0 |
| 2.5° | 1036.5 | 1034.0 | 1026.5 | 1021.5 | 1016.5 |
| 5° | 1021.5 | 1021.5 | 1029.0 | 1024.0 | 1016.5 |
| 7.5° | 1014.0 | 1014.0 | 1014.0 | 1026.5 | 1014.0 |
| 10° | 1006.4 | 1008.9 | 1006.4 | 1016.5 | 1006.4 |
| 12.5° | 998.9 | 998.9 | 998.9 | 1001.4 | 1001.4 |
| 15° | 983.9 | 986.4 | 988.9 | 991.4 | 993.9 |
| 17.5° | 968.9 | 971.4 | 976.4 | 978.9 | 981.4 |
| 20° | 953.9 | 956.4 | 963.9 | 963.9 | 968.9 |
| 22.5° | 933.8 | 933.8 | 943.9 | 946.4 | 953.9 |
| 25° | 908.8 | 913.8 | 923.8 | 931.3 | 936.3 |
| 27.5° | 886.3 | 891.3 | 901.3 | 911.3 | 918.8 |
| 30° | 861.2 | 866.2 | 876.3 | 891.3 | 901.3 |
| 32.5° | 833.7 | 838.7 | 853.7 | 871.2 | 881.3 |
| 35° | 806.2 | 811.2 | 828.7 | 851.2 | 863.7 |
| 37.5° | 776.1 | 783.6 | 803.7 | 828.7 | 843.7 |
| 40° | 746.1 | 753.6 | 776.1 | 803.7 | 826.2 |
| 42.5° | 711.0 | 721.0 | 746.1 | 783.6 | 808.7 |
| 45° | 676.0 | 688.5 | 718.5 | 763.6 | 791.1 |
| 47.5° | 638.4 | 650.9 | 686.0 | 743.6 | 773.6 |
| 50° | 600.9 | 615.9 | 658.4 | 721.0 | 753.6 |
| 52.5° | 560.8 | 575.8 | 630.9 | 698.5 | 733.6 |
| 55° | 518.2 | 540.8 | 603.4 | 673.5 | 708.5 |
| 57.5° | 475.7 | 500.7 | 570.8 | 645.9 | 683.5 |
| 60° | 430.6 | 460.7 | 540.8 | 615.9 | 653.4 |
| 62.5° | 388.1 | 420.6 | 508.2 | 583.3 | 620.9 |
| 65° | 343.0 | 380.5 | 473.2 | 548.3 | 583.3 |
| 67.5° | 295.4 | 343.0 | 433.1 | 505.7 | 540.8 |
| 70° | 247.9 | 302.9 | 393.1 | 460.7 | 493.2 |
| 72.5° | 205.3 | 262.9 | 348.0 | 405.6 | 405.6 |
| 75° | 162.7 | 220.3 | 297.9 | 302.9 | 295.4 |
| 77.5° | 125.2 | 180.3 | 232.8 | 212.8 | 217.8 |
| 80° | 92.6 | 137.7 | 147.7 | 155.2 | 160.2 |
| 82.5° | 62.6 | 92.6 | 95.1 | 100.1 | 100.1 |
| 85° | 40.1 | 47.6 | 50.1 | 47.6 | 45.1 |
| 87.5° | 17.5 | 20.0 | 15.0 | 10.0 | 7.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)