

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P892984

Luminaire Tested: 2MB-SC3-ASYMR-UNV-CC93-HI-3500K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892984
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2410-248-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-SC3-ASYMR-UNV-CC93-HI-3500K
Description: Selectable 2FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 90CRI, 3500K CCT, HI luv setting
Light Source: -
Ballast/Driver: -

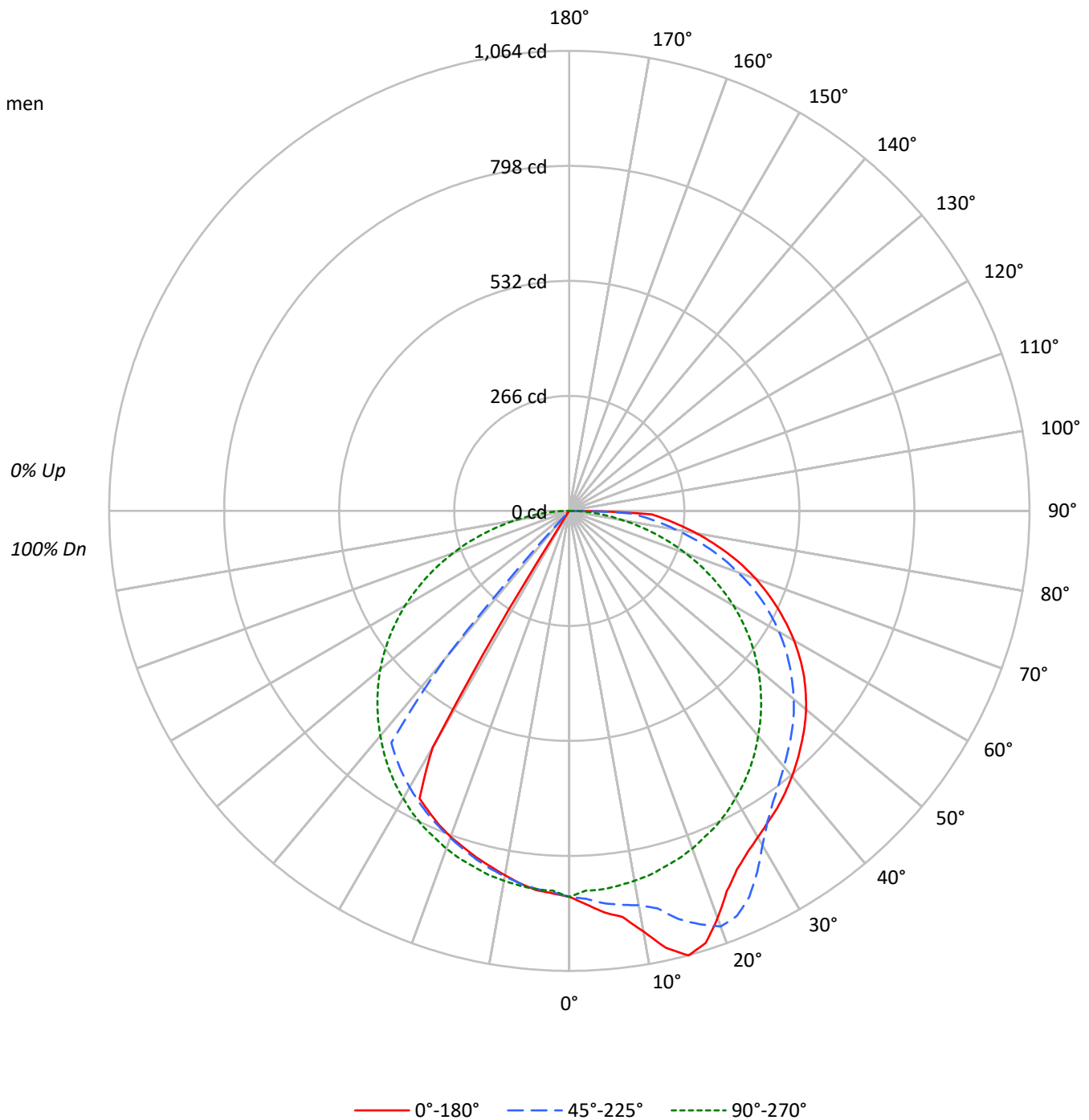
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2415.0 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.28 / 1.25
Luminous Opening: Rectangular (W 0.21' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 21
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.39961257980444
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 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 | | | 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 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 65 | 88 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 67 | 62 | 70 | 65 | 61 | 59 |
| 4 | 83 | 71 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 65 | 58 | 53 | 62 | 57 | 53 | 50 |
| 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 | 42 | 53 | 46 | 41 | 51 | 45 | 41 | 39 |
| 7 | 66 | 52 | 44 | 37 | 64 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 36 | 35 |
| 8 | 61 | 48 | 39 | 34 | 60 | 47 | 39 | 33 | 46 | 38 | 33 | 45 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 28 | 53 | 40 | 33 | 28 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 32 | 27 | 26 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|-------|-------|-------|-------|-------|
| 0° | 23304 | 23304 | 23304 | 23304 | 23304 |
| 5° | 24439 | 23875 | 23031 | 22992 | 23071 |
| 10° | 26185 | 24557 | 23027 | 22754 | 22688 |
| 15° | 28770 | 26421 | 23034 | 22537 | 22426 |
| 20° | 27853 | 28423 | 23094 | 22357 | 22285 |
| 25° | 26390 | 28363 | 23149 | 22282 | 22121 |
| 30° | 26276 | 26924 | 23150 | 22254 | 19050 |
| 35° | 26721 | 26183 | 23187 | 22256 | 261 |
| 40° | 27303 | 26308 | 23155 | 15350 | 174 |
| 45° | 28050 | 26842 | 23161 | 284 | 114 |
| 50° | 29029 | 27514 | 23172 | 207 | 41 |
| 55° | 30133 | 28294 | 23105 | 141 | 23 |
| 60° | 31340 | 29257 | 22902 | 52 | 26 |
| 65° | 32816 | 30413 | 22487 | 62 | 62 |
| 70° | 35007 | 31686 | 21778 | 76 | 76 |
| 75° | 38312 | 33722 | 20830 | 202 | 101 |
| 80° | 44970 | 37738 | 19290 | 301 | 150 |
| 85° | 66921 | 52991 | 18063 | 449 | 300 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 114740 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 85.5 | 3.5 |
| 10°-20° | 255.4 | 10.6 |
| 20°-30° | 392.6 | 16.3 |
| 30°-40° | 420.7 | 17.4 |
| 40°-50° | 382.1 | 15.8 |
| 50°-60° | 348.5 | 14.4 |
| 60°-70° | 259.3 | 10.7 |
| 70°-80° | 182.5 | 7.6 |
| 80°-90° | 88.4 | 3.7 |
| 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° | 733.5 | 30.4 |
| 0°-40° | 1154.2 | 47.8 |
| 0°-60° | 1884.8 | 78.0 |
| 0°-90° | 2415.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2415.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0° | 893 | 893 | 893 | 893 | 893 | |
| 5° | 932 | 911 | 879 | 877 | 880 | 90 |
| 15° | 1064 | 978 | 852 | 834 | 830 | 294 |
| 25° | 916 | 985 | 804 | 774 | 768 | 426 |
| 35° | 838 | 822 | 728 | 698 | 8 | 525 |
| 45° | 760 | 727 | 627 | 8 | 3 | 587 |
| 55° | 662 | 622 | 508 | 3 | 0 | 591 |
| 65° | 531 | 492 | 364 | 1 | 1 | 526 |
| 75° | 380 | 334 | 206 | 2 | 1 | 401 |
| 85° | 223 | 177 | 60 | 2 | 1 | 224 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P892984

CATALOG NUMBER: 2MB-SC3-ASYMR-UNV-CC93-HI-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|--------|--------|--------|-------|-------|--------|-------|--------|-------|
| 0° | 892.6 | 892.6 | 892.6 | 892.6 | 892.6 | 892.6 | 892.6 | 892.6 | 892.6 |
| 2.5° | 911.0 | 900.8 | 898.2 | 905.4 | 879.3 | 896.7 | 882.4 | 885.4 | 885.4 |
| 5° | 932.5 | 918.2 | 911.0 | 908.9 | 878.8 | 890.5 | 877.3 | 877.3 | 880.3 |
| 7.5° | 947.3 | 931.4 | 918.7 | 913.5 | 874.2 | 884.4 | 869.1 | 869.1 | 869.1 |
| 10° | 987.7 | 958.0 | 926.3 | 917.1 | 868.6 | 876.2 | 858.3 | 859.4 | 855.8 |
| 12.5° | 1035.2 | 1008.6 | 941.2 | 915.6 | 862.4 | 866.0 | 847.1 | 846.6 | 842.5 |
| 15° | 1064.4 | 1044.4 | 977.5 | 913.5 | 852.2 | 855.3 | 833.8 | 832.3 | 829.7 |
| 17.5° | 1048.0 | 1044.9 | 1002.5 | 912.0 | 843.0 | 840.4 | 819.0 | 817.4 | 815.4 |
| 20° | 1002.5 | 1010.2 | 1023.0 | 908.9 | 831.2 | 826.1 | 804.7 | 803.6 | 802.1 |
| 22.5° | 951.9 | 959.6 | 1013.7 | 914.1 | 816.9 | 810.8 | 789.3 | 788.3 | 786.3 |
| 25° | 916.1 | 916.1 | 984.6 | 926.3 | 803.6 | 792.4 | 773.5 | 771.9 | 767.9 |
| 27.5° | 891.1 | 886.5 | 941.2 | 940.1 | 786.8 | 774.0 | 756.6 | 755.1 | 750.0 |
| 30° | 871.6 | 864.0 | 893.1 | 946.8 | 767.9 | 754.0 | 738.2 | 736.7 | 631.9 |
| 32.5° | 854.2 | 846.1 | 852.7 | 952.4 | 748.9 | 732.6 | 718.8 | 512.8 | 22.5 |
| 35° | 838.4 | 829.2 | 821.5 | 948.3 | 727.5 | 711.1 | 698.3 | 14.8 | 8.2 |
| 37.5° | 820.5 | 813.4 | 796.0 | 926.8 | 704.5 | 688.1 | 675.8 | 8.2 | 7.2 |
| 40° | 801.1 | 794.4 | 771.9 | 895.1 | 679.4 | 665.6 | 450.4 | 7.2 | 5.1 |
| 42.5° | 781.1 | 776.0 | 749.4 | 849.1 | 654.4 | 640.6 | 14.3 | 5.6 | 4.1 |
| 45° | 759.7 | 755.1 | 727.0 | 793.4 | 627.3 | 614.5 | 7.7 | 4.1 | 3.1 |
| 47.5° | 737.7 | 731.0 | 703.4 | 733.6 | 599.7 | 586.9 | 6.6 | 3.1 | 2.0 |
| 50° | 714.7 | 707.5 | 677.4 | 680.9 | 570.5 | 557.7 | 5.1 | 2.0 | 1.0 |
| 52.5° | 689.1 | 680.4 | 649.8 | 633.4 | 539.8 | 528.1 | 4.1 | 1.0 | 0.5 |
| 55° | 662.0 | 652.3 | 621.6 | 592.0 | 507.6 | 494.3 | 3.1 | 1.0 | 0.5 |
| 57.5° | 631.9 | 621.1 | 592.0 | 552.6 | 473.4 | 334.3 | 2.0 | 1.0 | 0.5 |
| 60° | 600.2 | 589.4 | 560.3 | 515.8 | 438.6 | 23.0 | 1.0 | 1.0 | 0.5 |
| 62.5° | 566.4 | 555.2 | 527.1 | 478.5 | 401.3 | 18.9 | 1.0 | 1.0 | 1.0 |
| 65° | 531.2 | 517.9 | 492.3 | 440.2 | 364.0 | 15.8 | 1.0 | 1.0 | 1.0 |
| 67.5° | 495.9 | 479.0 | 455.0 | 400.8 | 325.6 | 13.3 | 1.0 | 1.0 | 1.0 |
| 70° | 458.6 | 440.2 | 415.1 | 360.9 | 285.3 | 10.7 | 1.0 | 1.0 | 1.0 |
| 72.5° | 420.2 | 402.3 | 375.2 | 320.5 | 247.4 | 8.2 | 1.0 | 1.0 | 1.0 |
| 75° | 379.8 | 363.5 | 334.3 | 280.1 | 206.5 | 6.1 | 2.0 | 1.0 | 1.0 |
| 77.5° | 337.9 | 325.1 | 292.4 | 238.7 | 166.7 | 4.1 | 2.0 | 1.0 | 1.0 |
| 80° | 299.1 | 284.7 | 251.0 | 196.8 | 128.3 | 3.1 | 2.0 | 1.5 | 1.0 |
| 82.5° | 259.2 | 246.4 | 212.7 | 158.5 | 92.0 | 2.6 | 2.0 | 1.5 | 1.0 |
| 85° | 223.4 | 211.1 | 176.9 | 123.7 | 60.3 | 2.0 | 1.5 | 1.5 | 1.0 |
| 87.5° | 191.7 | 180.5 | 146.7 | 90.5 | 34.3 | 1.5 | 1.5 | 1.5 | 1.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 25.47 | 27.09 | 25.84 | 27.40 | 27.71 | 20.90 | 22.52 | 21.27 | 22.83 | 23.15 |
| | 3H | 27.92 | 29.38 | 28.29 | 29.71 | 30.07 | 21.55 | 23.01 | 21.92 | 23.34 | 23.70 |
| | 4H | 29.04 | 30.42 | 29.44 | 30.77 | 31.15 | 21.69 | 23.07 | 22.09 | 23.42 | 23.80 |
| | 6H | 30.13 | 31.42 | 30.55 | 31.78 | 32.17 | 21.73 | 23.02 | 22.14 | 23.38 | 23.77 |
| | 8H | 30.66 | 31.89 | 31.09 | 32.28 | 32.68 | 21.72 | 22.95 | 22.14 | 23.34 | 23.74 |
| | 12H | 31.23 | 32.41 | 31.66 | 32.79 | 33.22 | 21.70 | 22.88 | 22.13 | 23.26 | 23.69 |
| 4H | 2H | 26.13 | 27.51 | 26.53 | 27.86 | 28.23 | 22.03 | 23.41 | 22.43 | 23.76 | 24.14 |
| | 3H | 28.82 | 29.99 | 29.23 | 30.38 | 30.78 | 23.37 | 24.54 | 23.78 | 24.94 | 25.34 |
| | 4H | 30.11 | 31.17 | 30.54 | 31.59 | 32.02 | 23.91 | 24.97 | 24.34 | 25.38 | 25.82 |
| | 6H | 31.39 | 32.33 | 31.85 | 32.77 | 33.22 | 24.18 | 25.12 | 24.64 | 25.56 | 26.01 |
| | 8H | 32.02 | 32.90 | 32.48 | 33.34 | 33.80 | 24.22 | 25.10 | 24.68 | 25.54 | 26.00 |
| | 12H | 32.71 | 33.50 | 33.19 | 33.97 | 34.44 | 24.23 | 25.02 | 24.71 | 25.50 | 25.97 |
| 8H | 4H | 30.48 | 31.35 | 30.94 | 31.79 | 32.26 | 24.85 | 25.73 | 25.31 | 26.17 | 26.64 |
| | 6H | 31.96 | 32.70 | 32.45 | 33.18 | 33.66 | 25.45 | 26.18 | 25.94 | 26.67 | 27.14 |
| | 8H | 32.74 | 33.41 | 33.25 | 33.91 | 34.40 | 25.62 | 26.29 | 26.13 | 26.79 | 27.28 |
| | 12H | 33.63 | 34.22 | 34.14 | 34.71 | 35.27 | 25.73 | 26.32 | 26.23 | 26.81 | 27.37 |
| 12H | 4H | 30.52 | 31.31 | 31.00 | 31.78 | 32.25 | 25.07 | 25.86 | 25.55 | 26.34 | 26.81 |
| | 6H | 32.05 | 32.71 | 32.55 | 33.22 | 33.70 | 25.80 | 26.46 | 26.30 | 26.97 | 27.45 |
| | 8H | 32.93 | 33.52 | 33.43 | 34.01 | 34.57 | 26.11 | 26.70 | 26.61 | 27.19 | 27.75 |