

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: P895229

Luminaire Tested: 8TMB-8SL-LVR-UNV-L830

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P895229  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 8TMB-8SL-LVR-UNV-L830  
Description: 8000 Lumen 8FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

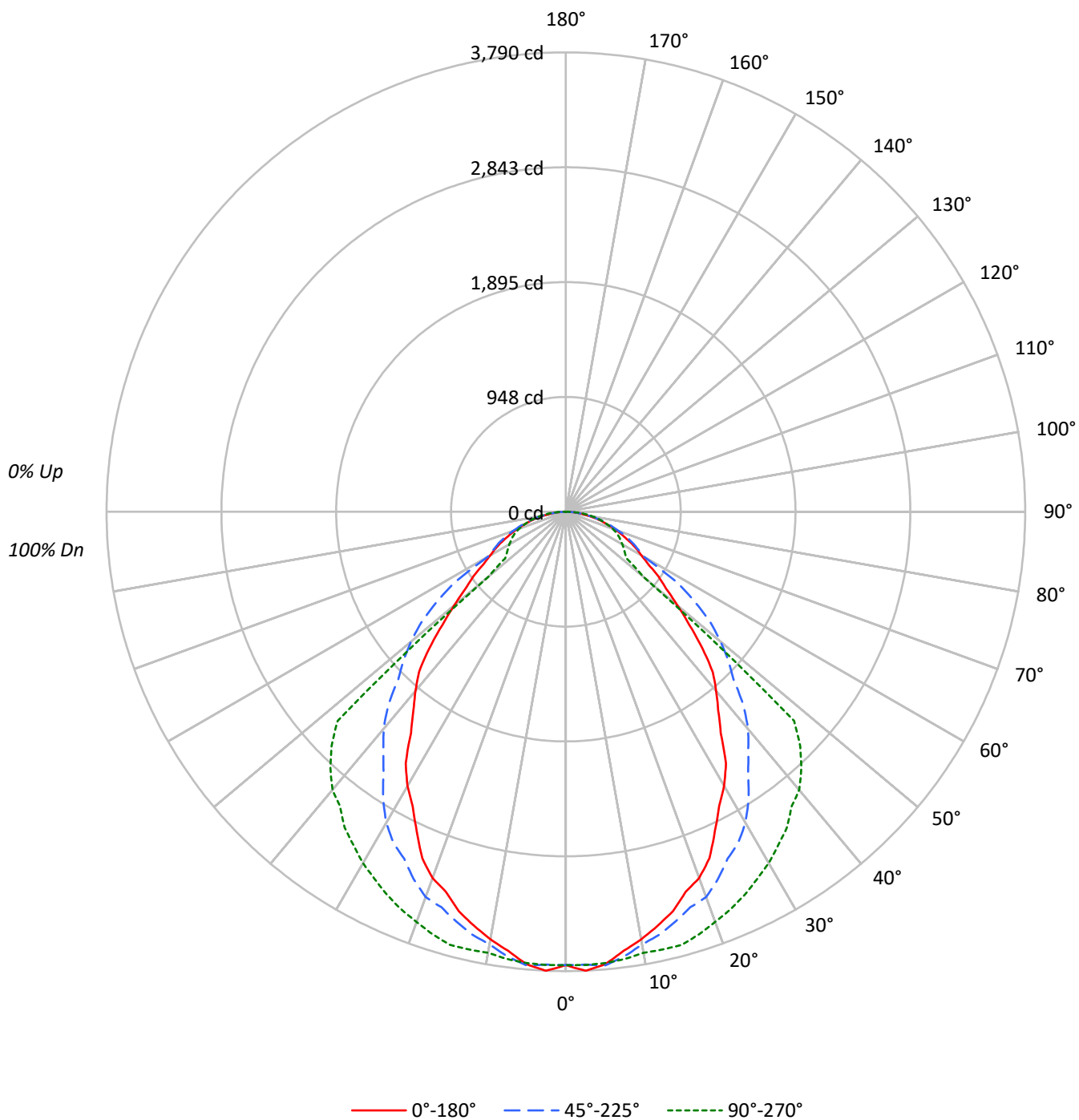
Lumens per Lamp: N/A  
Luminaire Lumens: 7983.0 lumens  
Efficiency: N/A  
Efficacy: 133.9 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.32 / 1.27  
Luminous Opening: Rectangular (W 0.38' x L: 7.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 59.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 3.8  
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  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 110 | 106 | 102 | 99  | 108 | 104 | 100 | 97  | 100 | 97  | 94  |  | 96  | 93  | 91  |  | 92  |
| 2   | 102 | 94  | 88  | 83  | 99  | 92  | 87  | 82  | 89  | 84  | 80  |  | 86  | 82  | 79  |  | 83  |
| 3   | 94  | 84  | 77  | 71  | 91  | 83  | 76  | 71  | 80  | 74  | 69  |  | 77  | 72  | 68  |  | 75  |
| 4   | 87  | 76  | 68  | 62  | 84  | 74  | 67  | 61  | 72  | 66  | 61  |  | 70  | 64  | 60  |  | 68  |
| 5   | 80  | 68  | 60  | 54  | 78  | 67  | 60  | 54  | 65  | 59  | 53  |  | 63  | 58  | 53  |  | 62  |
| 6   | 75  | 62  | 54  | 48  | 73  | 61  | 54  | 48  | 60  | 53  | 48  |  | 58  | 52  | 47  |  | 56  |
| 7   | 69  | 57  | 49  | 43  | 68  | 56  | 48  | 43  | 55  | 48  | 43  |  | 53  | 47  | 42  |  | 52  |
| 8   | 65  | 52  | 44  | 39  | 63  | 52  | 44  | 39  | 50  | 43  | 39  |  | 49  | 43  | 38  |  | 48  |
| 9   | 61  | 48  | 40  | 35  | 59  | 48  | 40  | 35  | 47  | 40  | 35  |  | 45  | 39  | 35  |  | 44  |
| 10  | 57  | 45  | 37  | 32  | 56  | 44  | 37  | 32  | 43  | 37  | 32  |  | 42  | 36  | 32  |  | 41  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13273 | 13273 | 13273 |
| 5°  | 13344 | 13378 | 13310 |
| 10° | 12907 | 13058 | 13313 |
| 15° | 12534 | 12850 | 13587 |
| 20° | 12141 | 12776 | 13598 |
| 25° | 11392 | 12364 | 13658 |
| 30° | 10700 | 12141 | 13714 |
| 35° | 9649  | 11354 | 13779 |
| 40° | 8938  | 10831 | 13875 |
| 45° | 7995  | 9817  | 13719 |
| 50° | 6633  | 9196  | 4609  |
| 55° | 5780  | 8072  | 3687  |
| 60° | 5111  | 5260  | 3823  |
| 65° | 4860  | 5117  | 4058  |
| 70° | 4558  | 4836  | 4281  |
| 75° | 4243  | 4557  | 4401  |
| 80° | 3864  | 4295  | 4606  |
| 85° | 3424  | 3656  | 4979  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13719 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 354.8  | 4.4       |
| 10°-20°   | 998.2  | 12.5      |
| 20°-30°   | 1468.3 | 18.4      |
| 30°-40°   | 1679.2 | 21.0      |
| 40°-50°   | 1590.0 | 19.9      |
| 50°-60°   | 876.0  | 11.0      |
| 60°-70°   | 562.5  | 7.0       |
| 70°-80°   | 347.1  | 4.3       |
| 80°-90°   | 106.9  | 1.3       |
| 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°    | 2821.3 | 35.3      |
| 0°-40°    | 4500.5 | 56.4      |
| 0°-60°    | 6966.6 | 87.3      |
| 0°-90°    | 7983.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7983.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 3741 | 3741  | 3741 | 3741  | 3741 |      |
| 5°  | 3747 | 3777  | 3756 | 3756  | 3737 | 351  |
| 15° | 3412 | 3454  | 3498 | 3682  | 3699 | 958  |
| 25° | 2910 | 3040  | 3158 | 3364  | 3489 | 1340 |
| 35° | 2228 | 2419  | 2621 | 3002  | 3181 | 1408 |
| 45° | 1593 | 1744  | 1956 | 2510  | 2734 | 1219 |
| 55° | 934  | 980   | 1305 | 672   | 596  | 835  |
| 65° | 579  | 598   | 610  | 543   | 483  | 573  |
| 75° | 310  | 315   | 332  | 350   | 321  | 329  |
| 85° | 84   | 84    | 90   | 103   | 122  | 94   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 3740.8 | 3740.8 | 3740.8 | 3740.8 | 3740.8 |
| 2.5°  | 3790.5 | 3800.1 | 3738.9 | 3737.0 | 3742.8 |
| 5°    | 3746.6 | 3777.1 | 3756.1 | 3756.1 | 3737.0 |
| 7.5°  | 3653.0 | 3704.5 | 3698.8 | 3742.8 | 3721.7 |
| 10°   | 3582.3 | 3624.3 | 3624.3 | 3738.9 | 3695.0 |
| 12.5° | 3498.2 | 3546.0 | 3572.7 | 3693.1 | 3698.8 |
| 15°   | 3412.2 | 3454.3 | 3498.2 | 3681.6 | 3698.8 |
| 17.5° | 3288.0 | 3364.5 | 3419.9 | 3599.5 | 3654.9 |
| 20°   | 3215.4 | 3261.3 | 3383.6 | 3528.8 | 3601.4 |
| 22.5° | 3095.1 | 3162.0 | 3280.4 | 3442.8 | 3549.8 |
| 25°   | 2909.8 | 3039.7 | 3158.1 | 3364.5 | 3488.7 |
| 27.5° | 2737.8 | 2835.2 | 3079.8 | 3297.6 | 3416.1 |
| 30°   | 2611.7 | 2688.1 | 2963.3 | 3200.2 | 3347.3 |
| 32.5° | 2458.9 | 2583.1 | 2806.6 | 3104.6 | 3261.3 |
| 35°   | 2227.7 | 2418.7 | 2621.3 | 3001.5 | 3181.1 |
| 37.5° | 2065.3 | 2197.1 | 2472.2 | 2894.5 | 3060.7 |
| 40°   | 1929.7 | 2050.0 | 2338.5 | 2760.7 | 2995.7 |
| 42.5° | 1794.0 | 1891.4 | 2170.4 | 2661.4 | 2875.4 |
| 45°   | 1593.4 | 1744.3 | 1956.4 | 2510.5 | 2734.0 |
| 47.5° | 1383.2 | 1543.7 | 1816.9 | 2382.4 | 2554.4 |
| 50°   | 1201.7 | 1329.7 | 1666.0 | 2128.3 | 834.9  |
| 52.5° | 1043.2 | 1161.6 | 1505.5 | 769.9  | 630.5  |
| 55°   | 934.3  | 980.1  | 1304.9 | 672.5  | 596.1  |
| 57.5° | 804.3  | 878.9  | 1094.7 | 640.0  | 565.5  |
| 60°   | 720.3  | 752.8  | 741.3  | 607.6  | 538.8  |
| 62.5° | 653.4  | 676.3  | 672.5  | 575.1  | 508.2  |
| 65°   | 578.9  | 598.0  | 609.5  | 542.6  | 483.4  |
| 67.5° | 504.4  | 521.6  | 538.8  | 502.5  | 449.0  |
| 70°   | 439.4  | 450.9  | 466.2  | 454.7  | 412.7  |
| 72.5° | 372.6  | 385.9  | 395.5  | 405.0  | 364.9  |
| 75°   | 309.5  | 315.2  | 332.4  | 349.6  | 321.0  |
| 77.5° | 252.2  | 257.9  | 269.4  | 288.5  | 273.2  |
| 80°   | 189.1  | 194.9  | 210.2  | 225.4  | 225.4  |
| 82.5° | 133.7  | 137.6  | 147.1  | 168.1  | 177.7  |
| 85°   | 84.1   | 84.1   | 89.8   | 103.2  | 122.3  |
| 87.5° | 32.5   | 32.5   | 38.2   | 45.9   | 61.1   |
| 90°   | 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 | 16.93            | 18.42 | 17.30 | 18.73 | 19.04 | 14.74          | 16.22 | 15.10 | 16.53 | 16.85 |
|                 | 3H   | 18.46            | 19.79 | 18.84 | 20.12 | 20.48 | 17.07          | 18.39 | 17.44 | 18.72 | 19.08 |
|                 | 4H   | 19.05            | 20.30 | 19.45 | 20.64 | 21.02 | 18.02          | 19.26 | 18.42 | 19.61 | 19.99 |
|                 | 6H   | 19.51            | 20.66 | 19.92 | 21.02 | 21.42 | 18.80          | 19.95 | 19.21 | 20.32 | 20.71 |
|                 | 8H   | 19.65            | 20.75 | 20.08 | 21.14 | 21.54 | 19.11          | 20.20 | 19.54 | 20.59 | 21.00 |
|                 | 12H  | 19.75            | 20.80 | 20.18 | 21.18 | 21.61 | 19.36          | 20.41 | 19.79 | 20.79 | 21.22 |
| 4H              | 2H   | 17.48            | 18.73 | 17.89 | 19.08 | 19.46 | 15.84          | 17.08 | 16.24 | 17.43 | 17.81 |
|                 | 3H   | 19.26            | 20.29 | 19.67 | 20.69 | 21.09 | 18.29          | 19.31 | 18.70 | 19.72 | 20.12 |
|                 | 4H   | 19.98            | 20.90 | 20.41 | 21.32 | 21.76 | 19.35          | 20.28 | 19.79 | 20.69 | 21.13 |
|                 | 6H   | 20.56            | 21.37 | 21.02 | 21.81 | 22.27 | 20.24          | 21.05 | 20.70 | 21.49 | 21.95 |
|                 | 8H   | 20.75            | 21.50 | 21.22 | 21.95 | 22.42 | 20.59          | 21.34 | 21.06 | 21.79 | 22.26 |
|                 | 12H  | 20.89            | 21.56 | 21.37 | 22.04 | 22.51 | 20.88          | 21.55 | 21.36 | 22.03 | 22.50 |
| 8H              | 4H   | 20.28            | 21.04 | 20.75 | 21.48 | 21.95 | 19.74          | 20.49 | 20.20 | 20.94 | 21.40 |
|                 | 6H   | 20.99            | 21.62 | 21.49 | 22.11 | 22.59 | 20.77          | 21.40 | 21.27 | 21.89 | 22.37 |
|                 | 8H   | 21.26            | 21.82 | 21.77 | 22.33 | 22.82 | 21.22          | 21.78 | 21.73 | 22.29 | 22.78 |
|                 | 12H  | 21.47            | 21.96 | 21.98 | 22.46 | 23.02 | 21.60          | 22.10 | 22.11 | 22.59 | 23.16 |
| 12H             | 4H   | 20.32            | 20.99 | 20.80 | 21.47 | 21.94 | 19.77          | 20.45 | 20.26 | 20.93 | 21.40 |
|                 | 6H   | 21.06            | 21.62 | 21.57 | 22.13 | 22.62 | 20.84          | 21.40 | 21.35 | 21.91 | 22.40 |
|                 | 8H   | 21.38            | 21.88 | 21.89 | 22.37 | 22.94 | 21.35          | 21.85 | 21.86 | 22.34 | 22.90 |