

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: P601439

Luminaire Tested: 22CGSB-25-L835

Issue Date: 1/24/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P601439  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2307-104-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/24/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 22CGSB-25-L835  
Description: 2x2 CGSB AT 2500lm 3500K 80CRI  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

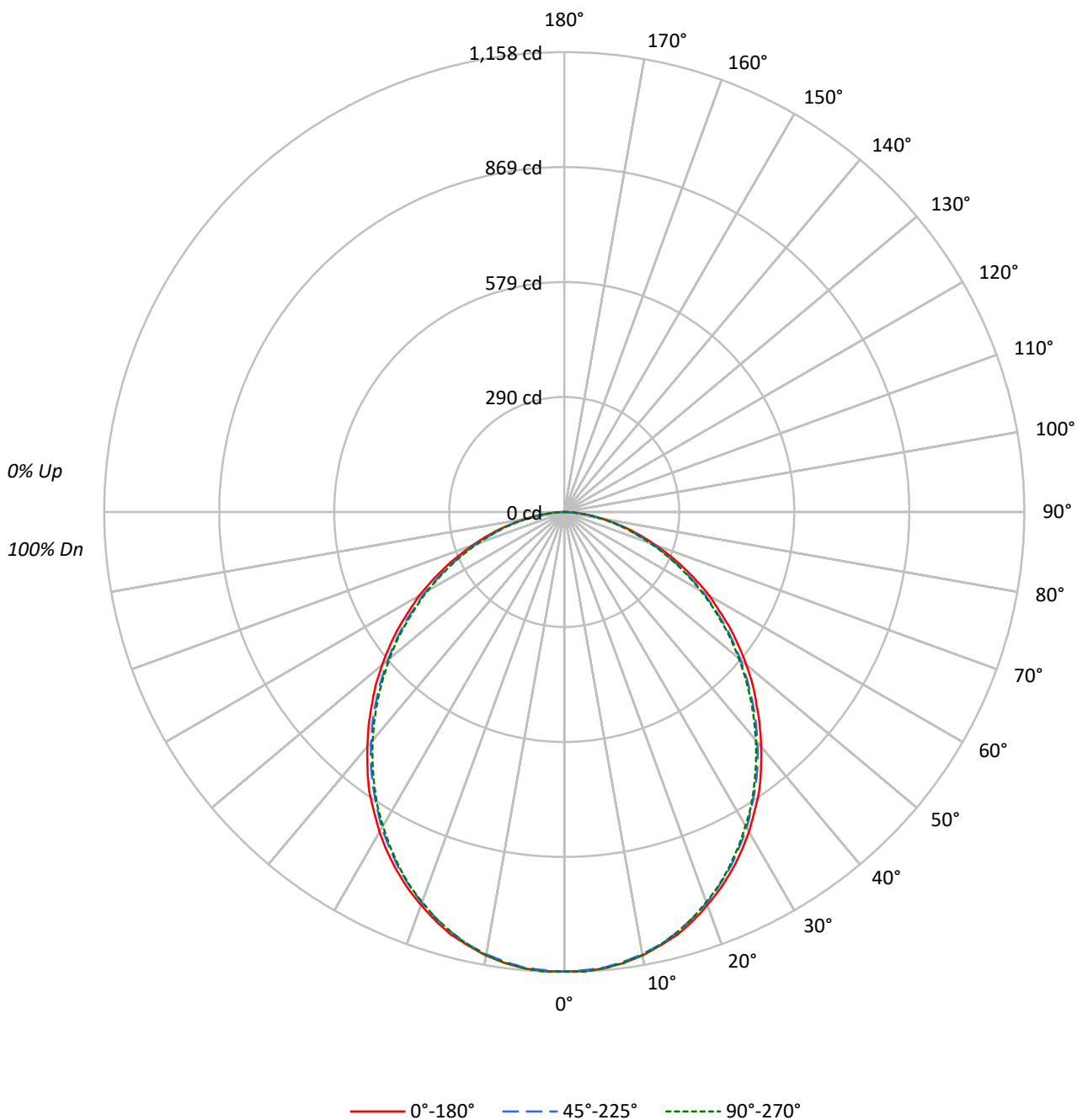
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2891.0 lumens  
Efficiency: N/A  
Efficacy: 141.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 20.4  
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: 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  | 30  | 10  |     |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 109 | 105 | 101 | 97  | 107 | 102 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 89  | 91  | 89  | 87  | 85  |
| 2   | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 86  | 81  | 77  | 83  | 79  | 75  | 80  | 77  | 73  | 71  |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 63  | 61  |
| 4   | 84  | 72  | 64  | 57  | 81  | 71  | 63  | 57  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 54  | 52  |
| 5   | 77  | 65  | 56  | 49  | 75  | 64  | 55  | 49  | 61  | 54  | 49  | 59  | 53  | 48  | 58  | 52  | 48  | 45  |
| 6   | 71  | 58  | 50  | 43  | 69  | 57  | 49  | 43  | 56  | 48  | 43  | 54  | 47  | 42  | 52  | 47  | 42  | 40  |
| 7   | 66  | 53  | 44  | 38  | 65  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 37  | 36  |
| 8   | 62  | 49  | 40  | 34  | 60  | 48  | 40  | 34  | 47  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 34  | 32  |
| 9   | 58  | 45  | 37  | 31  | 56  | 44  | 36  | 31  | 43  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 29  |
| 10  | 54  | 41  | 33  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 28  | 26  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3113 | 3113 | 3113 |
| 5°  | 3116 | 3109 | 3116 |
| 10° | 3098 | 3089 | 3095 |
| 15° | 3069 | 3053 | 3053 |
| 20° | 3016 | 2999 | 2993 |
| 25° | 2959 | 2932 | 2922 |
| 30° | 2889 | 2854 | 2836 |
| 35° | 2813 | 2759 | 2741 |
| 40° | 2708 | 2655 | 2635 |
| 45° | 2605 | 2543 | 2522 |
| 50° | 2503 | 2422 | 2402 |
| 55° | 2389 | 2303 | 2271 |
| 60° | 2270 | 2171 | 2139 |
| 65° | 2113 | 2010 | 1989 |
| 70° | 1931 | 1858 | 1814 |
| 75° | 1761 | 1653 | 1666 |
| 80° | 1517 | 1429 | 1446 |
| 85° | 1173 | 1139 | 1068 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2605 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 109.3  | 3.8       |
| 10°-20°   | 309.0  | 10.7      |
| 20°-30°   | 455.1  | 15.7      |
| 30°-40°   | 526.5  | 18.2      |
| 40°-50°   | 517.6  | 17.9      |
| 50°-60°   | 441.1  | 15.3      |
| 60°-70°   | 316.0  | 10.9      |
| 70°-80°   | 171.6  | 5.9       |
| 80°-90°   | 44.8   | 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°    | 873.4  | 30.2      |
| 0°-40°    | 1399.8 | 48.4      |
| 0°-60°    | 2358.5 | 81.6      |
| 0°-90°    | 2891.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2891.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1157 | 1157  | 1157 | 1157  | 1157 |      |
| 5°  | 1153 | 1151  | 1151 | 1151  | 1153 | 109  |
| 15° | 1102 | 1097  | 1096 | 1095  | 1096 | 310  |
| 25° | 997  | 992   | 988  | 985   | 984  | 459  |
| 35° | 856  | 849   | 840  | 835   | 834  | 534  |
| 45° | 684  | 680   | 668  | 663   | 663  | 529  |
| 55° | 509  | 500   | 491  | 485   | 484  | 455  |
| 65° | 332  | 325   | 316  | 312   | 312  | 329  |
| 75° | 169  | 164   | 159  | 157   | 160  | 179  |
| 85° | 38   | 38    | 37   | 36    | 35   | 46   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°            | 22.5°         | 45°           | 67.5°         | 90°           |
|-------|---------------|---------------|---------------|---------------|---------------|
| 0°    | 1156.9        | 1156.9        | 1156.9        | 1156.9        | <i>1156.9</i> |
| 2.5°  | <i>1156.9</i> | <i>1155.8</i> | <i>1154.6</i> | <i>1155.8</i> | <i>1158.1</i> |
| 5°    | 1153.4        | 1151.1        | 1151.1        | 1151.1        | <i>1153.4</i> |
| 7.5°  | 1145.4        | 1143.1        | 1141.9        | 1143.1        | <i>1144.2</i> |
| 10°   | 1133.9        | 1131.6        | 1130.4        | 1131.6        | <i>1132.7</i> |
| 12.5° | 1117.7        | 1116.6        | 1115.4        | 1115.4        | <i>1116.6</i> |
| 15°   | 1101.6        | 1097.0        | 1095.8        | 1094.7        | <i>1095.8</i> |
| 17.5° | 1078.6        | 1077.4        | 1072.8        | 1072.8        | <i>1072.8</i> |
| 20°   | 1053.2        | 1050.9        | 1047.4        | 1045.1        | <i>1045.1</i> |
| 22.5° | 1026.7        | 1024.4        | 1018.6        | 1016.3        | <i>1017.5</i> |
| 25°   | 996.7         | 992.1         | 987.5         | 985.2         | <i>984.1</i>  |
| 27.5° | 964.5         | 959.9         | 952.9         | 949.5         | <i>949.5</i>  |
| 30°   | 929.9         | 926.4         | 918.4         | 913.8         | <i>912.6</i>  |
| 32.5° | 891.9         | 889.6         | 878.1         | 875.7         | <i>875.7</i>  |
| 35°   | 856.2         | 849.2         | 840.0         | 835.4         | <i>834.3</i>  |
| 37.5° | 813.5         | 808.9         | 799.7         | 793.9         | <i>792.8</i>  |
| 40°   | 770.9         | 765.1         | 755.9         | 751.3         | <i>750.1</i>  |
| 42.5° | 728.3         | 722.5         | 713.3         | 707.5         | <i>706.4</i>  |
| 45°   | 684.5         | 679.9         | 668.3         | 662.6         | <i>662.6</i>  |
| 47.5° | 643.0         | 633.8         | 623.4         | 618.8         | <i>617.6</i>  |
| 50°   | 598.0         | 590.0         | 578.5         | 573.8         | <i>573.8</i>  |
| 52.5° | 553.1         | 547.3         | 534.7         | 532.4         | <i>530.1</i>  |
| 55°   | 509.3         | 500.1         | 490.9         | 485.1         | <i>484.0</i>  |
| 57.5° | 462.1         | 454.0         | 444.8         | 440.2         | <i>440.2</i>  |
| 60°   | 421.7         | 411.4         | 403.3         | 397.5         | <i>397.5</i>  |
| 62.5° | 375.6         | 366.4         | 358.4         | 354.9         | <i>353.8</i>  |
| 65°   | 331.9         | 324.9         | 315.7         | 312.3         | <i>312.3</i>  |
| 67.5° | 288.1         | 282.3         | 274.2         | 270.8         | <i>271.9</i>  |
| 70°   | 245.4         | 242.0         | 236.2         | 231.6         | <i>230.5</i>  |
| 72.5° | 206.3         | 201.7         | 195.9         | 194.7         | <i>194.7</i>  |
| 75°   | 169.4         | 163.6         | 159.0         | 156.7         | <i>160.2</i>  |
| 77.5° | 131.4         | 127.9         | 125.6         | 124.4         | <i>125.6</i>  |
| 80°   | 97.9          | 93.3          | 92.2          | 93.3          | <i>93.3</i>   |
| 82.5° | 68.0          | 65.7          | 64.5          | 64.5          | <i>64.5</i>   |
| 85°   | 38.0          | 38.0          | 36.9          | 35.7          | <i>34.6</i>   |
| 87.5° | 15.0          | 15.0          | 16.1          | 16.1          | <i>17.3</i>   |
| 90°   | 0.0           | 0.0           | 0.0           | 0.0           | <i>0.0</i>    |

(END OF REPORT)