

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: P601345

Luminaire Tested: 14CGSB-70-L850

Issue Date: 1/24/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P601345  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2311-233-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/24/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 14CGSB-70-L850  
Description: 1x4 CGSB AT 7000lm 5000K 80CRI  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

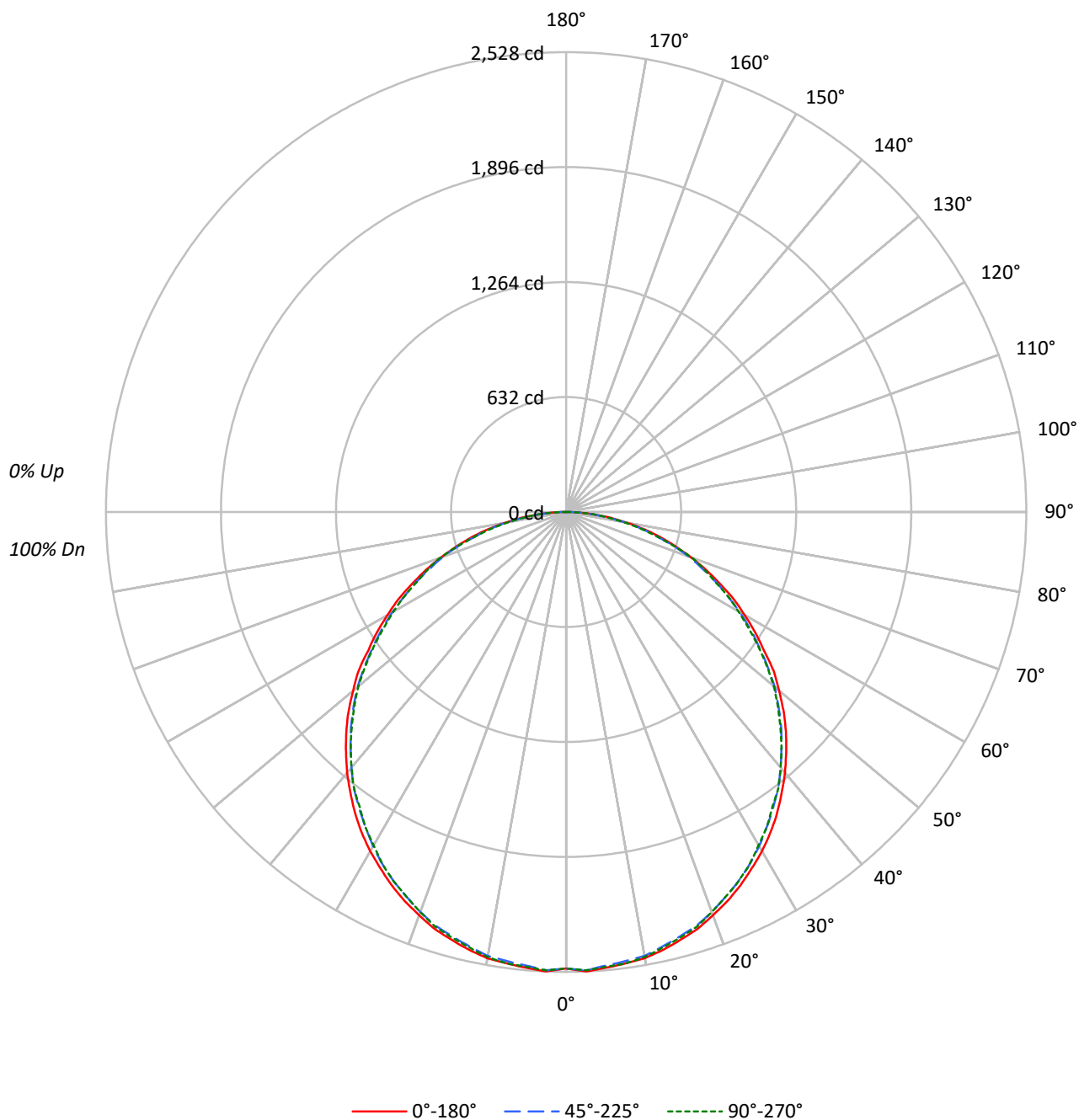
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7283.9 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 74.8  
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  |     |     |  | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 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 |  | 100 |
| 1   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 94  | 97  | 94  | 91  |  | 93  | 90  | 88  |  | 83  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 82  | 76  | 84  | 79  | 74  |  | 81  | 77  | 73  |  | 69  |
| 3   | 90  | 79  | 71  | 64  | 87  | 77  | 70  | 63  | 74  | 68  | 62  |  | 71  | 66  | 61  |  | 58  |
| 4   | 82  | 70  | 61  | 54  | 80  | 68  | 60  | 54  | 66  | 59  | 53  |  | 64  | 57  | 52  |  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 53  | 46  | 59  | 51  | 46  |  | 57  | 50  | 45  |  | 43  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 40  | 53  | 46  | 40  |  | 52  | 45  | 40  |  | 37  |
| 7   | 64  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 48  | 41  | 35  |  | 47  | 40  | 35  |  | 33  |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 37  | 32  | 44  | 37  | 32  |  | 43  | 36  | 31  |  | 29  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 33  | 28  |  | 40  | 33  | 28  |  | 26  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  |  | 37  | 30  | 26  |  | 24  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6751 | 6751 | 6751 |
| 5°  | 6794 | 6760 | 6777 |
| 10° | 6804 | 6770 | 6787 |
| 15° | 6780 | 6728 | 6746 |
| 20° | 6755 | 6701 | 6701 |
| 25° | 6725 | 6651 | 6651 |
| 30° | 6688 | 6591 | 6571 |
| 35° | 6639 | 6515 | 6495 |
| 40° | 6571 | 6440 | 6440 |
| 45° | 6500 | 6357 | 6333 |
| 50° | 6391 | 6260 | 6234 |
| 55° | 6223 | 6076 | 6047 |
| 60° | 6095 | 5927 | 5893 |
| 65° | 5936 | 5777 | 5736 |
| 70° | 5759 | 5661 | 5809 |
| 75° | 5595 | 5334 | 5334 |
| 80° | 5236 | 5139 | 4945 |
| 85° | 4829 | 4638 | 4638 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6500 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 238.6  | 3.3       |
| 10°-20°   | 683.8  | 9.4       |
| 20°-30°   | 1034.7 | 14.2      |
| 30°-40°   | 1246.8 | 17.1      |
| 40°-50°   | 1294.6 | 17.8      |
| 50°-60°   | 1165.9 | 16.0      |
| 60°-70°   | 900.9  | 12.4      |
| 70°-80°   | 548.9  | 7.5       |
| 80°-90°   | 169.7  | 2.3       |
| 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°    | 1957.1 | 26.9      |
| 0°-40°    | 3203.9 | 44.0      |
| 0°-60°    | 5664.4 | 77.8      |
| 0°-90°    | 7283.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7283.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2509 | 2509  | 2509 | 2509  | 2509 |      |
| 5°  | 2515 | 2509  | 2503 | 2503  | 2509 | 239  |
| 15° | 2434 | 2428  | 2415 | 2415  | 2421 | 687  |
| 25° | 2265 | 2259  | 2240 | 2234  | 2240 | 1044 |
| 35° | 2021 | 2008  | 1983 | 1977  | 1977 | 1264 |
| 45° | 1708 | 1696  | 1670 | 1664  | 1664 | 1316 |
| 55° | 1326 | 1314  | 1295 | 1289  | 1289 | 1191 |
| 65° | 932  | 914   | 907  | 895   | 901  | 924  |
| 75° | 538  | 519   | 513  | 507   | 513  | 565  |
| 85° | 156  | 156   | 150  | 144   | 150  | 177  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P601345

CATALOG NUMBER: 14CGSB-70-L850

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2508.9 | 2508.9 | 2508.9 | 2508.9 | 2508.9 |
| 2.5°  | 2527.7 | 2527.7 | 2521.4 | 2521.4 | 2521.4 |
| 5°    | 2515.1 | 2508.9 | 2502.6 | 2502.6 | 2508.9 |
| 7.5°  | 2502.6 | 2502.6 | 2490.1 | 2490.1 | 2502.6 |
| 10°   | 2490.1 | 2483.9 | 2477.6 | 2477.6 | 2483.9 |
| 12.5° | 2465.1 | 2458.8 | 2446.3 | 2446.3 | 2452.6 |
| 15°   | 2433.8 | 2427.6 | 2415.0 | 2415.0 | 2421.3 |
| 17.5° | 2402.5 | 2396.3 | 2383.8 | 2383.8 | 2390.0 |
| 20°   | 2358.7 | 2352.5 | 2340.0 | 2333.7 | 2340.0 |
| 22.5° | 2314.9 | 2308.7 | 2289.9 | 2283.7 | 2289.9 |
| 25°   | 2264.9 | 2258.6 | 2239.9 | 2233.6 | 2239.9 |
| 27.5° | 2208.6 | 2202.3 | 2183.5 | 2177.3 | 2183.5 |
| 30°   | 2152.3 | 2139.7 | 2121.0 | 2108.5 | 2114.7 |
| 32.5° | 2089.7 | 2077.2 | 2052.2 | 2045.9 | 2052.2 |
| 35°   | 2020.9 | 2008.4 | 1983.3 | 1977.1 | 1977.1 |
| 37.5° | 1945.8 | 1939.5 | 1914.5 | 1908.3 | 1914.5 |
| 40°   | 1870.7 | 1858.2 | 1833.2 | 1826.9 | 1833.2 |
| 42.5° | 1789.4 | 1776.9 | 1751.8 | 1751.8 | 1751.8 |
| 45°   | 1708.0 | 1695.5 | 1670.5 | 1664.2 | 1664.2 |
| 47.5° | 1620.5 | 1607.9 | 1582.9 | 1576.7 | 1576.7 |
| 50°   | 1526.6 | 1514.1 | 1495.3 | 1489.1 | 1489.1 |
| 52.5° | 1439.0 | 1420.2 | 1395.2 | 1389.0 | 1389.0 |
| 55°   | 1326.4 | 1313.9 | 1295.1 | 1288.9 | 1288.9 |
| 57.5° | 1232.5 | 1213.8 | 1201.3 | 1188.7 | 1188.7 |
| 60°   | 1132.4 | 1113.7 | 1101.2 | 1094.9 | 1094.9 |
| 62.5° | 1038.6 | 1013.6 | 1001.1 | 994.8  | 1001.1 |
| 65°   | 932.2  | 913.5  | 907.2  | 894.7  | 900.9  |
| 67.5° | 832.1  | 813.4  | 807.1  | 807.1  | 819.6  |
| 70°   | 732.0  | 713.2  | 719.5  | 700.7  | 738.3  |
| 72.5° | 631.9  | 619.4  | 619.4  | 600.6  | 619.4  |
| 75°   | 538.1  | 519.3  | 513.0  | 506.8  | 513.0  |
| 77.5° | 438.0  | 431.7  | 425.4  | 412.9  | 419.2  |
| 80°   | 337.9  | 350.4  | 331.6  | 312.8  | 319.1  |
| 82.5° | 250.3  | 244.0  | 231.5  | 225.2  | 231.5  |
| 85°   | 156.4  | 156.4  | 150.2  | 143.9  | 150.2  |
| 87.5° | 75.1   | 75.1   | 68.8   | 68.8   | 75.1   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)