

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: P234125

Luminaire Tested: **22GR-LD5-60-A125-UNV-L930-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234125  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33297)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-60-A125-UNV-L930-CD1-U  
Description: METALUX 2X2 GRLED TROFFER  
WITH A125 LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4655.1 lumens  
Efficiency: N/A  
Efficacy: 93.9 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.22 / 1.24  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

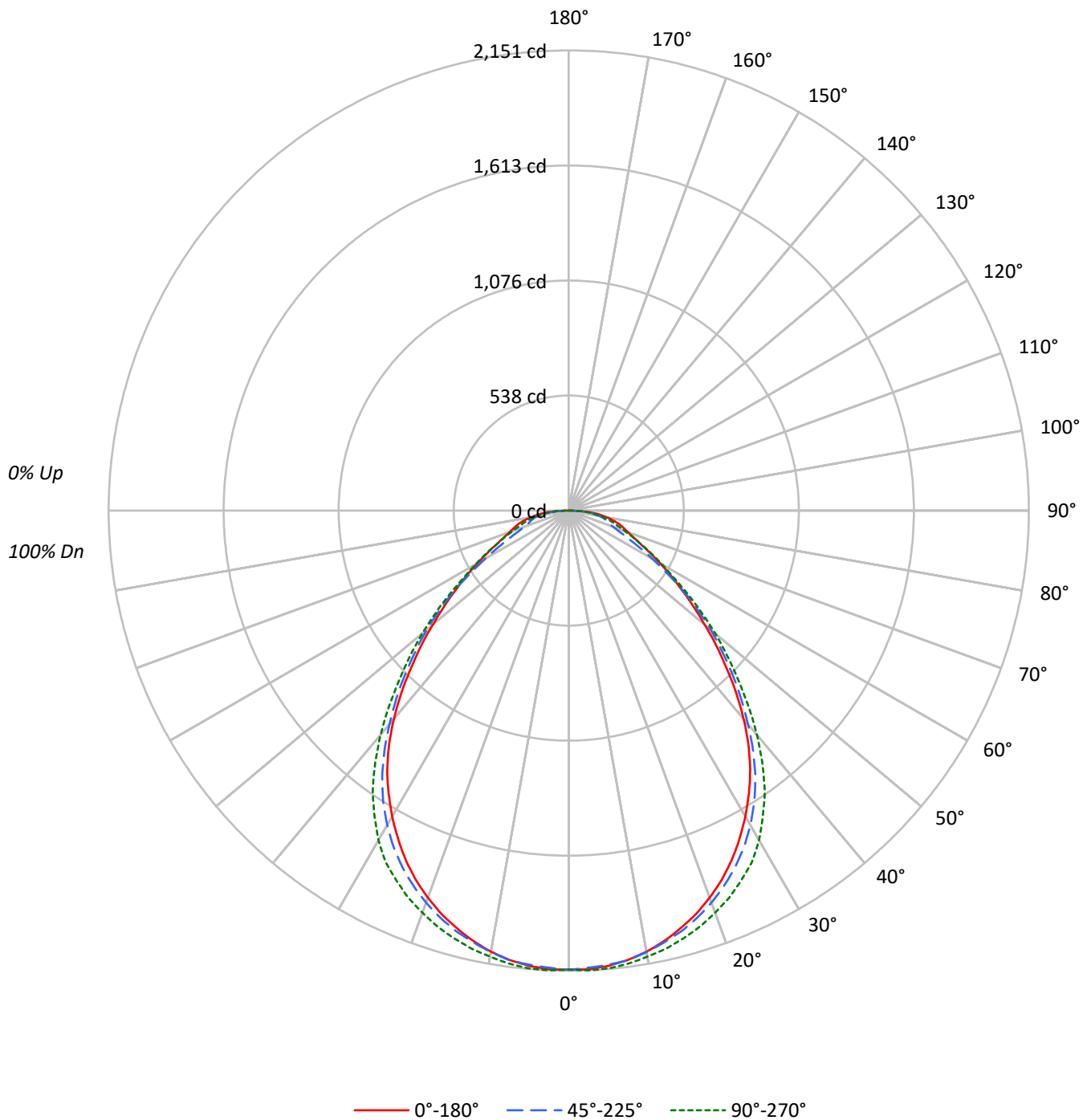
Input Watts (W): 49.58  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 105 | 102 | 98  | 107 | 103 | 100 | 96  |  | 99  | 96  | 93  |  |  | 95  | 93  | 91  |  |  | 92  |
| 2   | 101 | 94  | 87  | 82  | 98  | 92  | 86  | 81  |  | 88  | 83  | 79  |  |  | 85  | 81  | 78  |  |  | 82  |
| 3   | 93  | 83  | 76  | 70  | 91  | 82  | 75  | 69  |  | 79  | 73  | 68  |  |  | 76  | 71  | 67  |  |  | 74  |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 60  |  | 71  | 65  | 59  |  |  | 69  | 63  | 59  |  |  | 67  |
| 5   | 80  | 68  | 59  | 53  | 78  | 67  | 59  | 53  |  | 65  | 58  | 52  |  |  | 63  | 57  | 52  |  |  | 61  |
| 6   | 74  | 61  | 53  | 47  | 72  | 61  | 53  | 47  |  | 59  | 52  | 47  |  |  | 57  | 51  | 46  |  |  | 56  |
| 7   | 69  | 56  | 48  | 42  | 67  | 55  | 48  | 42  |  | 54  | 47  | 42  |  |  | 52  | 46  | 41  |  |  | 51  |
| 8   | 64  | 52  | 44  | 38  | 63  | 51  | 43  | 38  |  | 50  | 43  | 38  |  |  | 48  | 42  | 38  |  |  | 47  |
| 9   | 60  | 48  | 40  | 35  | 59  | 47  | 40  | 34  |  | 46  | 39  | 34  |  |  | 45  | 39  | 34  |  |  | 44  |
| 10  | 57  | 44  | 37  | 32  | 55  | 44  | 36  | 32  |  | 43  | 36  | 31  |  |  | 42  | 36  | 31  |  |  | 41  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6872 | 6872 | 6872 |
| 5°  | 6867 | 6849 | 6905 |
| 10° | 6808 | 6815 | 6886 |
| 15° | 6701 | 6747 | 6862 |
| 20° | 6562 | 6647 | 6817 |
| 25° | 6370 | 6501 | 6738 |
| 30° | 6105 | 6277 | 6578 |
| 35° | 5784 | 5945 | 6246 |
| 40° | 5318 | 5449 | 5722 |
| 45° | 4724 | 4896 | 5073 |
| 50° | 4126 | 4315 | 4445 |
| 55° | 3588 | 3636 | 3769 |
| 60° | 3156 | 2892 | 3219 |
| 65° | 2805 | 2311 | 2821 |
| 70° | 2754 | 2053 | 2601 |
| 75° | 3008 | 2257 | 2659 |
| 80° | 3303 | 2683 | 2844 |
| 85° | 3946 | 3109 | 3189 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 202.8  | 4.4       |
| 10°-20°   | 575.1  | 12.4      |
| 20°-30°   | 849.0  | 18.2      |
| 30°-40°   | 950.0  | 20.4      |
| 40°-50°   | 834.3  | 17.9      |
| 50°-60°   | 590.3  | 12.7      |
| 60°-70°   | 343.6  | 7.4       |
| 70°-80°   | 214.2  | 4.6       |
| 80°-90°   | 95.8   | 2.1       |
| 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°    | 1626.9 | 34.9      |
| 0°-40°    | 2576.9 | 55.4      |
| 0°-60°    | 4001.5 | 86.0      |
| 0°-90°    | 4655.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4655.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2146 | 2146  | 2146 | 2146  | 2146 |      |
| 5°  | 2136 | 2130  | 2130 | 2141  | 2148 | 203  |
| 15° | 2021 | 2025  | 2035 | 2057  | 2070 | 569  |
| 25° | 1803 | 1810  | 1840 | 1883  | 1907 | 828  |
| 35° | 1479 | 1486  | 1521 | 1566  | 1598 | 920  |
| 45° | 1043 | 1055  | 1081 | 1107  | 1120 | 807  |
| 55° | 643  | 656   | 651  | 663   | 675  | 581  |
| 65° | 370  | 341   | 305  | 332   | 372  | 375  |
| 75° | 243  | 210   | 182  | 187   | 215  | 254  |
| 85° | 107  | 112   | 85   | 82    | 87   | 109  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2145.8 | 2145.8 | 2145.8 | 2145.8 | 2145.8 |
| 2.5°  | 2145.8 | 2141.4 | 2139.2 | 2146.8 | 2151.2 |
| 5°    | 2136.0 | 2130.5 | 2130.5 | 2141.4 | 2147.9 |
| 7.5°  | 2118.6 | 2113.2 | 2119.7 | 2129.5 | 2136.0 |
| 10°   | 2093.6 | 2091.5 | 2095.8 | 2108.9 | 2117.6 |
| 12.5° | 2061.1 | 2062.1 | 2066.5 | 2087.1 | 2098.0 |
| 15°   | 2021.0 | 2025.2 | 2035.1 | 2056.7 | 2069.8 |
| 17.5° | 1977.5 | 1980.8 | 1996.0 | 2021.0 | 2039.4 |
| 20°   | 1925.4 | 1931.9 | 1950.4 | 1981.9 | 2000.3 |
| 22.5° | 1867.9 | 1875.5 | 1898.3 | 1936.3 | 1959.1 |
| 25°   | 1802.8 | 1810.4 | 1839.7 | 1883.1 | 1907.0 |
| 27.5° | 1729.0 | 1740.9 | 1773.5 | 1821.2 | 1853.8 |
| 30°   | 1650.8 | 1660.6 | 1697.5 | 1751.8 | 1778.9 |
| 32.5° | 1567.3 | 1579.2 | 1613.9 | 1666.0 | 1689.9 |
| 35°   | 1479.4 | 1485.8 | 1520.6 | 1566.2 | 1597.6 |
| 37.5° | 1379.5 | 1382.8 | 1415.3 | 1457.6 | 1485.8 |
| 40°   | 1272.1 | 1274.2 | 1303.5 | 1343.7 | 1368.7 |
| 42.5° | 1160.2 | 1161.4 | 1192.8 | 1223.2 | 1244.9 |
| 45°   | 1043.0 | 1054.9 | 1081.0 | 1107.1 | 1120.1 |
| 47.5° | 937.8  | 946.4  | 970.3  | 993.1  | 1005.1 |
| 50°   | 828.1  | 849.8  | 866.1  | 878.1  | 892.2  |
| 52.5° | 733.7  | 752.2  | 756.5  | 770.6  | 782.5  |
| 55°   | 642.6  | 655.6  | 651.2  | 663.1  | 675.1  |
| 57.5° | 565.5  | 559.0  | 544.8  | 565.5  | 580.6  |
| 60°   | 492.7  | 475.4  | 451.5  | 479.7  | 502.5  |
| 62.5° | 427.6  | 399.4  | 370.1  | 398.4  | 436.3  |
| 65°   | 370.1  | 340.8  | 305.0  | 332.1  | 372.3  |
| 67.5° | 326.7  | 296.3  | 254.0  | 281.1  | 321.3  |
| 70°   | 294.1  | 262.6  | 219.3  | 242.1  | 277.8  |
| 72.5° | 268.1  | 234.4  | 196.5  | 211.6  | 242.1  |
| 75°   | 243.1  | 209.5  | 182.4  | 186.7  | 214.9  |
| 77.5° | 213.9  | 188.8  | 167.1  | 165.0  | 186.7  |
| 80°   | 179.1  | 171.5  | 145.5  | 142.2  | 154.2  |
| 82.5° | 147.6  | 144.3  | 119.4  | 116.1  | 120.5  |
| 85°   | 107.4  | 111.8  | 84.6   | 82.5   | 86.8   |
| 87.5° | 56.4   | 61.8   | 44.5   | 46.7   | 47.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)