

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: P475972

Luminaire Tested: **22GR-LD5-50-F125-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475972  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-50-F125-UNV-L850-CD1-U  
Description: GR 2'X2' LED TROFFER w/ F125 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5160.1 lumens  
Efficiency: N/A  
Efficacy: 139.8 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

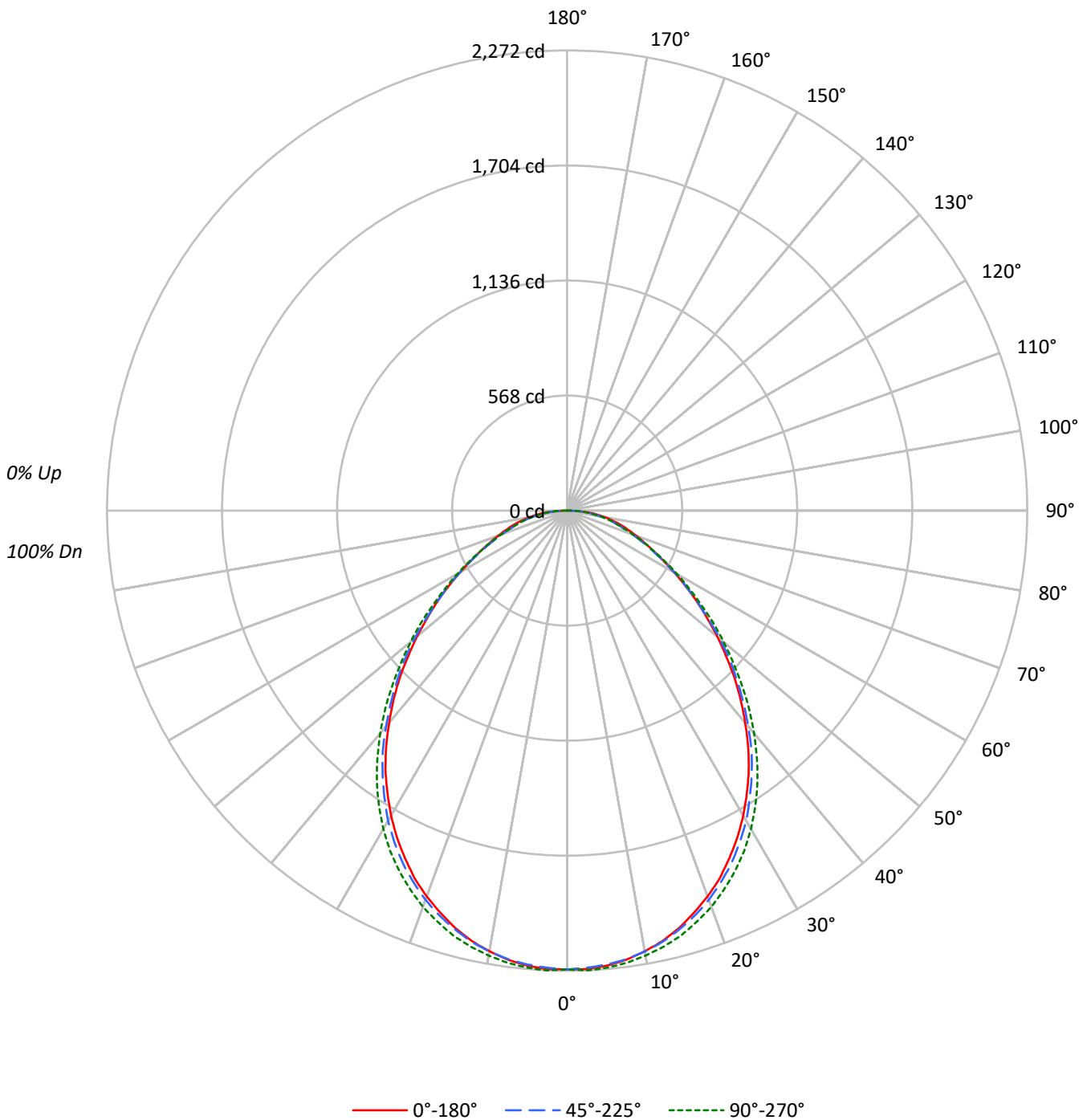
Input Watts (W): 36.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 |    |     |   |  | 0 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 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 |    |    |    |    | 100 |   |  |   |
| 1   | 110 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 99  | 96  | 93  | 95  | 92  | 90  | 91  | 89  | 87  |     |    |    |    | 85 |     |   |  |   |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  |     |    |    |    | 73 |     |   |  |   |
| 3   | 92  | 82  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 68  | 65  |     |    |    |    | 62 |     |   |  |   |
| 4   | 85  | 74  | 65  | 59  | 83  | 72  | 65  | 59  | 70  | 63  | 58  | 68  | 62  | 57  | 65  | 60  | 56  |     |    |    |    | 54 |     |   |  |   |
| 5   | 78  | 66  | 58  | 52  | 76  | 65  | 57  | 51  | 63  | 56  | 51  | 61  | 55  | 50  | 59  | 54  | 50  |     |    |    |    | 48 |     |   |  |   |
| 6   | 73  | 60  | 52  | 45  | 71  | 59  | 51  | 45  | 57  | 50  | 45  | 56  | 49  | 45  | 54  | 49  | 44  |     |    |    |    | 42 |     |   |  |   |
| 7   | 68  | 55  | 46  | 41  | 66  | 54  | 46  | 40  | 53  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  |     |    |    |    | 38 |     |   |  |   |
| 8   | 63  | 50  | 42  | 36  | 62  | 50  | 42  | 36  | 48  | 41  | 36  | 47  | 41  | 36  | 46  | 40  | 36  |     |    |    |    | 34 |     |   |  |   |
| 9   | 59  | 46  | 38  | 33  | 58  | 46  | 38  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 43  | 37  | 33  |     |    |    |    | 31 |     |   |  |   |
| 10  | 56  | 43  | 35  | 30  | 54  | 42  | 35  | 30  | 41  | 35  | 30  | 40  | 34  | 30  | 40  | 34  | 30  |     |    |    |    | 28 |     |   |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6096 | 6096 | 6096 |
| 5°  | 6093 | 6077 | 6119 |
| 10° | 6037 | 6040 | 6095 |
| 15° | 5945 | 5964 | 6051 |
| 20° | 5805 | 5857 | 5962 |
| 25° | 5624 | 5703 | 5827 |
| 30° | 5402 | 5495 | 5640 |
| 35° | 5137 | 5220 | 5381 |
| 40° | 4804 | 4883 | 5043 |
| 45° | 4447 | 4516 | 4647 |
| 50° | 4050 | 4115 | 4221 |
| 55° | 3658 | 3668 | 3775 |
| 60° | 3280 | 3292 | 3371 |
| 65° | 2989 | 2926 | 2995 |
| 70° | 2843 | 2685 | 2732 |
| 75° | 2862 | 2589 | 2601 |
| 80° | 2969 | 2616 | 2597 |
| 85° | 3257 | 2766 | 2621 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 214.0  | 4.1       |
| 10°-20°   | 604.6  | 11.7      |
| 20°-30°   | 884.9  | 17.1      |
| 30°-40°   | 994.9  | 19.3      |
| 40°-50°   | 917.5  | 17.8      |
| 50°-60°   | 707.2  | 13.7      |
| 60°-70°   | 466.6  | 9.0       |
| 70°-80°   | 271.6  | 5.3       |
| 80°-90°   | 98.9   | 1.9       |
| 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°    | 1703.5 | 33.0      |
| 0°-40°    | 2698.4 | 52.3      |
| 0°-60°    | 4323.1 | 83.8      |
| 0°-90°    | 5160.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5160.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2265 | 2265  | 2265 | 2265  | 2265 |      |
| 5°  | 2256 | 2251  | 2250 | 2260  | 2265 | 214  |
| 15° | 2134 | 2134  | 2141 | 2160  | 2172 | 600  |
| 25° | 1894 | 1904  | 1921 | 1947  | 1962 | 871  |
| 35° | 1564 | 1571  | 1589 | 1621  | 1638 | 975  |
| 45° | 1169 | 1170  | 1187 | 1210  | 1221 | 900  |
| 55° | 780  | 778   | 782  | 795   | 805  | 699  |
| 65° | 470  | 467   | 460  | 463   | 470  | 471  |
| 75° | 275  | 264   | 249  | 244   | 250  | 290  |
| 85° | 106  | 104   | 90   | 83    | 85   | 112  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2265.2 | 2265.2 | 2265.2 | 2265.2 | 2265.2 |
| 2.5°  | 2265.2 | 2260.5 | 2259.2 | 2267.8 | 2272.5 |
| 5°    | 2255.7 | 2251.0 | 2249.7 | 2260.5 | 2265.2 |
| 7.5°  | 2236.7 | 2232.9 | 2234.2 | 2246.2 | 2252.2 |
| 10°   | 2209.2 | 2207.9 | 2210.4 | 2223.4 | 2230.7 |
| 12.5° | 2176.8 | 2175.6 | 2180.3 | 2194.6 | 2204.4 |
| 15°   | 2133.8 | 2133.8 | 2140.7 | 2160.1 | 2172.1 |
| 17.5° | 2082.1 | 2085.6 | 2096.4 | 2115.7 | 2128.7 |
| 20°   | 2027.0 | 2030.8 | 2045.1 | 2066.6 | 2082.1 |
| 22.5° | 1965.9 | 1970.9 | 1985.2 | 2011.5 | 2024.8 |
| 25°   | 1894.3 | 1903.8 | 1920.6 | 1946.9 | 1962.4 |
| 27.5° | 1819.8 | 1830.6 | 1846.1 | 1878.8 | 1893.0 |
| 30°   | 1738.4 | 1745.7 | 1768.5 | 1798.3 | 1815.1 |
| 32.5° | 1652.3 | 1659.6 | 1678.6 | 1714.7 | 1728.9 |
| 35°   | 1563.6 | 1570.9 | 1588.9 | 1621.2 | 1638.0 |
| 37.5° | 1467.9 | 1473.9 | 1495.5 | 1520.5 | 1538.6 |
| 40°   | 1367.5 | 1375.7 | 1390.0 | 1420.1 | 1435.6 |
| 42.5° | 1269.3 | 1272.8 | 1288.3 | 1318.4 | 1330.1 |
| 45°   | 1168.6 | 1169.8 | 1186.6 | 1210.4 | 1221.1 |
| 47.5° | 1064.3 | 1066.9 | 1087.2 | 1101.4 | 1112.2 |
| 50°   | 967.4  | 968.7  | 982.9  | 996.2  | 1008.3 |
| 52.5° | 870.5  | 870.5  | 877.8  | 892.0  | 907.5  |
| 55°   | 779.6  | 778.3  | 781.8  | 795.1  | 804.6  |
| 57.5° | 693.4  | 692.1  | 696.9  | 705.1  | 712.4  |
| 60°   | 609.5  | 606.9  | 611.7  | 616.8  | 626.3  |
| 62.5° | 535.3  | 537.6  | 531.5  | 538.8  | 546.1  |
| 65°   | 469.5  | 466.9  | 459.6  | 463.4  | 470.4  |
| 67.5° | 413.1  | 409.6  | 397.5  | 399.8  | 408.3  |
| 70°   | 361.4  | 354.5  | 341.2  | 341.2  | 347.2  |
| 72.5° | 314.9  | 307.6  | 290.8  | 292.1  | 294.6  |
| 75°   | 275.3  | 263.6  | 249.0  | 244.2  | 250.2  |
| 77.5° | 232.2  | 222.7  | 209.4  | 205.9  | 208.4  |
| 80°   | 191.6  | 184.4  | 168.8  | 164.1  | 167.6  |
| 82.5° | 152.0  | 146.0  | 128.0  | 124.5  | 125.8  |
| 85°   | 105.5  | 104.2  | 89.6   | 82.7   | 84.9   |
| 87.5° | 56.4   | 57.3   | 46.6   | 41.8   | 44.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)