

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: P213833

Luminaire Tested: **22GR-LD5-40-A125-UNV-L935-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P213833  
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-LD5-40-A125-UNV-L935-CD1-U  
Description: METALUX GR 2X2 LED TROFFER WITH A125 LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3466.3 lumens  
Efficiency: N/A  
Efficacy: 89.3 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

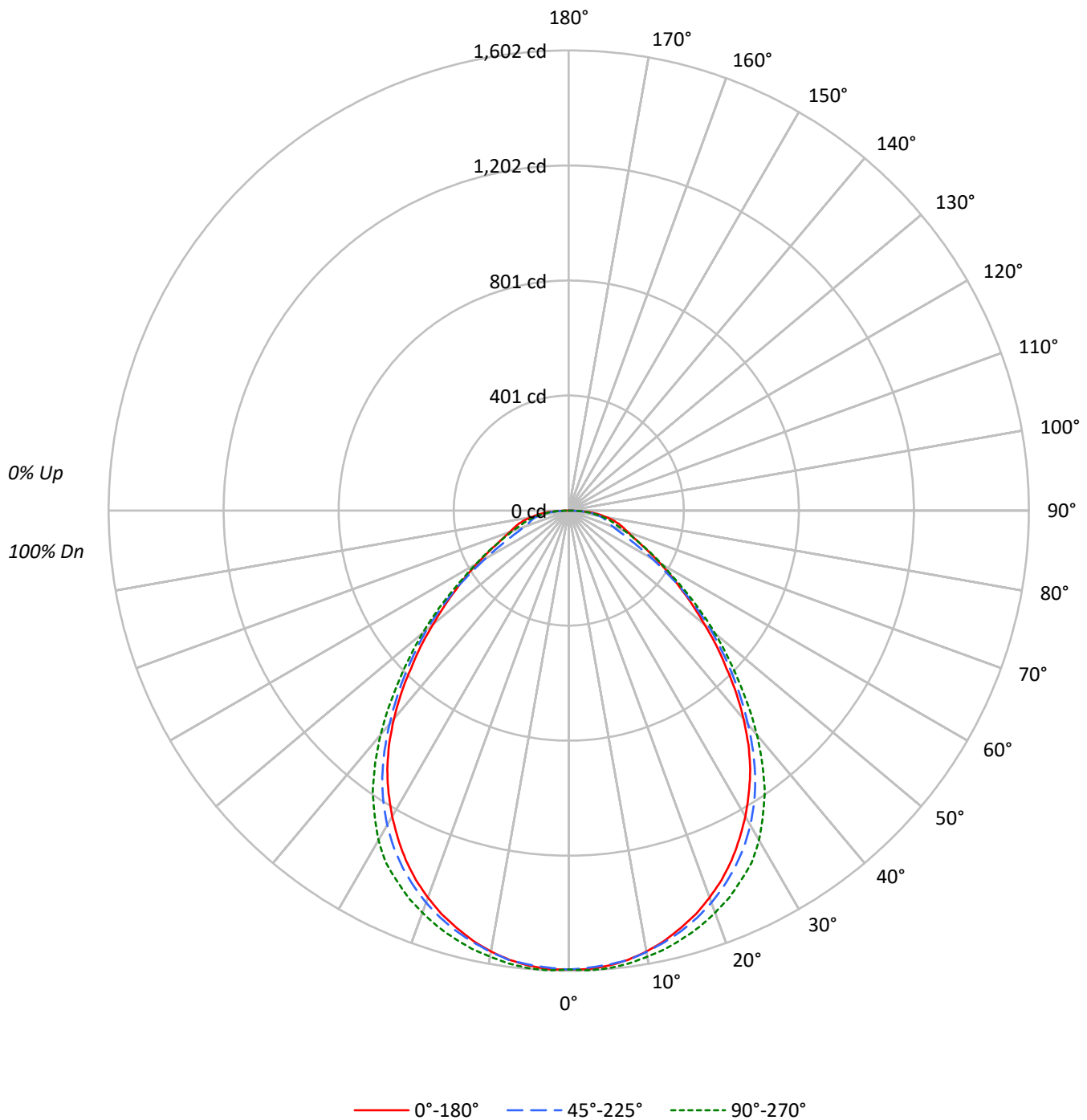
Input Watts (W): 38.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°  | 5117 | 5117 | 5117 |
| 5°  | 5113 | 5100 | 5142 |
| 10° | 5070 | 5075 | 5128 |
| 15° | 4989 | 5024 | 5110 |
| 20° | 4886 | 4949 | 5076 |
| 25° | 4743 | 4841 | 5018 |
| 30° | 4546 | 4674 | 4898 |
| 35° | 4307 | 4427 | 4651 |
| 40° | 3960 | 4058 | 4261 |
| 45° | 3517 | 3645 | 3777 |
| 50° | 3073 | 3213 | 3310 |
| 55° | 2672 | 2707 | 2807 |
| 60° | 2350 | 2153 | 2397 |
| 65° | 2088 | 1721 | 2101 |
| 70° | 2051 | 1529 | 1937 |
| 75° | 2240 | 1679 | 1981 |
| 80° | 2460 | 1997 | 2117 |
| 85° | 2940 | 2319 | 2377 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 151.0  | 4.4       |
| 10°-20°   | 428.2  | 12.4      |
| 20°-30°   | 632.2  | 18.2      |
| 30°-40°   | 707.4  | 20.4      |
| 40°-50°   | 621.2  | 17.9      |
| 50°-60°   | 439.6  | 12.7      |
| 60°-70°   | 255.9  | 7.4       |
| 70°-80°   | 159.5  | 4.6       |
| 80°-90°   | 71.4   | 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°    | 1211.4 | 34.9      |
| 0°-40°    | 1918.8 | 55.4      |
| 0°-60°    | 2979.6 | 86.0      |
| 0°-90°    | 3466.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3466.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1598 | 1598  | 1598 | 1598  | 1598 |      |
| 5°  | 1590 | 1586  | 1586 | 1595  | 1599 | 151  |
| 15° | 1505 | 1508  | 1515 | 1532  | 1541 | 424  |
| 25° | 1342 | 1348  | 1370 | 1402  | 1420 | 617  |
| 35° | 1102 | 1106  | 1132 | 1166  | 1190 | 685  |
| 45° | 777  | 786   | 805  | 824   | 834  | 601  |
| 55° | 478  | 488   | 485  | 494   | 503  | 432  |
| 65° | 276  | 254   | 227  | 247   | 277  | 280  |
| 75° | 181  | 156   | 136  | 139   | 160  | 189  |
| 85° | 80   | 83    | 63   | 62    | 65   | 81   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1597.8 | 1597.8 | 1597.8 | 1597.8 | 1597.8 |
| 2.5°  | 1597.8 | 1594.6 | 1593.0 | 1598.6 | 1601.8 |
| 5°    | 1590.5 | 1586.4 | 1586.4 | 1594.6 | 1599.4 |
| 7.5°  | 1577.6 | 1573.5 | 1578.4 | 1585.7 | 1590.5 |
| 10°   | 1559.0 | 1557.4 | 1560.6 | 1570.3 | 1576.8 |
| 12.5° | 1534.8 | 1535.5 | 1538.8 | 1554.1 | 1562.2 |
| 15°   | 1504.8 | 1508.1 | 1515.4 | 1531.5 | 1541.2 |
| 17.5° | 1472.5 | 1474.9 | 1486.2 | 1504.8 | 1518.6 |
| 20°   | 1433.7 | 1438.5 | 1452.3 | 1475.8 | 1489.5 |
| 22.5° | 1390.9 | 1396.6 | 1413.6 | 1441.8 | 1458.8 |
| 25°   | 1342.4 | 1348.1 | 1369.9 | 1402.2 | 1420.0 |
| 27.5° | 1287.4 | 1296.3 | 1320.6 | 1356.2 | 1380.4 |
| 30°   | 1229.3 | 1236.5 | 1264.0 | 1304.4 | 1324.6 |
| 32.5° | 1167.0 | 1175.9 | 1201.8 | 1240.6 | 1258.3 |
| 35°   | 1101.6 | 1106.4 | 1132.3 | 1166.2 | 1189.7 |
| 37.5° | 1027.2 | 1029.6 | 1053.9 | 1085.4 | 1106.4 |
| 40°   | 947.2  | 948.9  | 970.6  | 1000.5 | 1019.2 |
| 42.5° | 863.9  | 864.8  | 888.2  | 910.9  | 927.0  |
| 45°   | 776.6  | 785.6  | 804.9  | 824.3  | 834.0  |
| 47.5° | 698.3  | 704.7  | 722.5  | 739.5  | 748.4  |
| 50°   | 616.7  | 632.8  | 644.9  | 653.8  | 664.4  |
| 52.5° | 546.3  | 560.1  | 563.3  | 573.8  | 582.7  |
| 55°   | 478.5  | 488.2  | 484.9  | 493.8  | 502.7  |
| 57.5° | 421.1  | 416.2  | 405.7  | 421.1  | 432.4  |
| 60°   | 366.9  | 354.0  | 336.2  | 357.3  | 374.2  |
| 62.5° | 318.4  | 297.4  | 275.6  | 296.6  | 324.9  |
| 65°   | 275.6  | 253.8  | 227.1  | 247.3  | 277.2  |
| 67.5° | 243.3  | 220.7  | 189.1  | 209.4  | 239.2  |
| 70°   | 219.0  | 195.6  | 163.3  | 180.2  | 206.9  |
| 72.5° | 199.7  | 174.6  | 146.3  | 157.6  | 180.2  |
| 75°   | 181.0  | 156.0  | 135.7  | 139.0  | 160.1  |
| 77.5° | 159.2  | 140.6  | 124.4  | 122.8  | 139.0  |
| 80°   | 133.4  | 127.7  | 108.3  | 105.9  | 114.8  |
| 82.5° | 109.9  | 107.5  | 88.9   | 86.4   | 89.7   |
| 85°   | 80.0   | 83.2   | 63.1   | 61.5   | 64.7   |
| 87.5° | 42.0   | 46.1   | 33.2   | 34.8   | 35.5   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)