

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: P225723

Luminaire Tested: **22GR-LD5-36-A125-UNV-L935-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P225723  
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-LD5-36-A125-UNV-L935-CD1-U  
Description: METALUX GR 2X2 LED TROFFER WITH A125 LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3080.4 lumens  
Efficiency: N/A  
Efficacy: 89.1 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

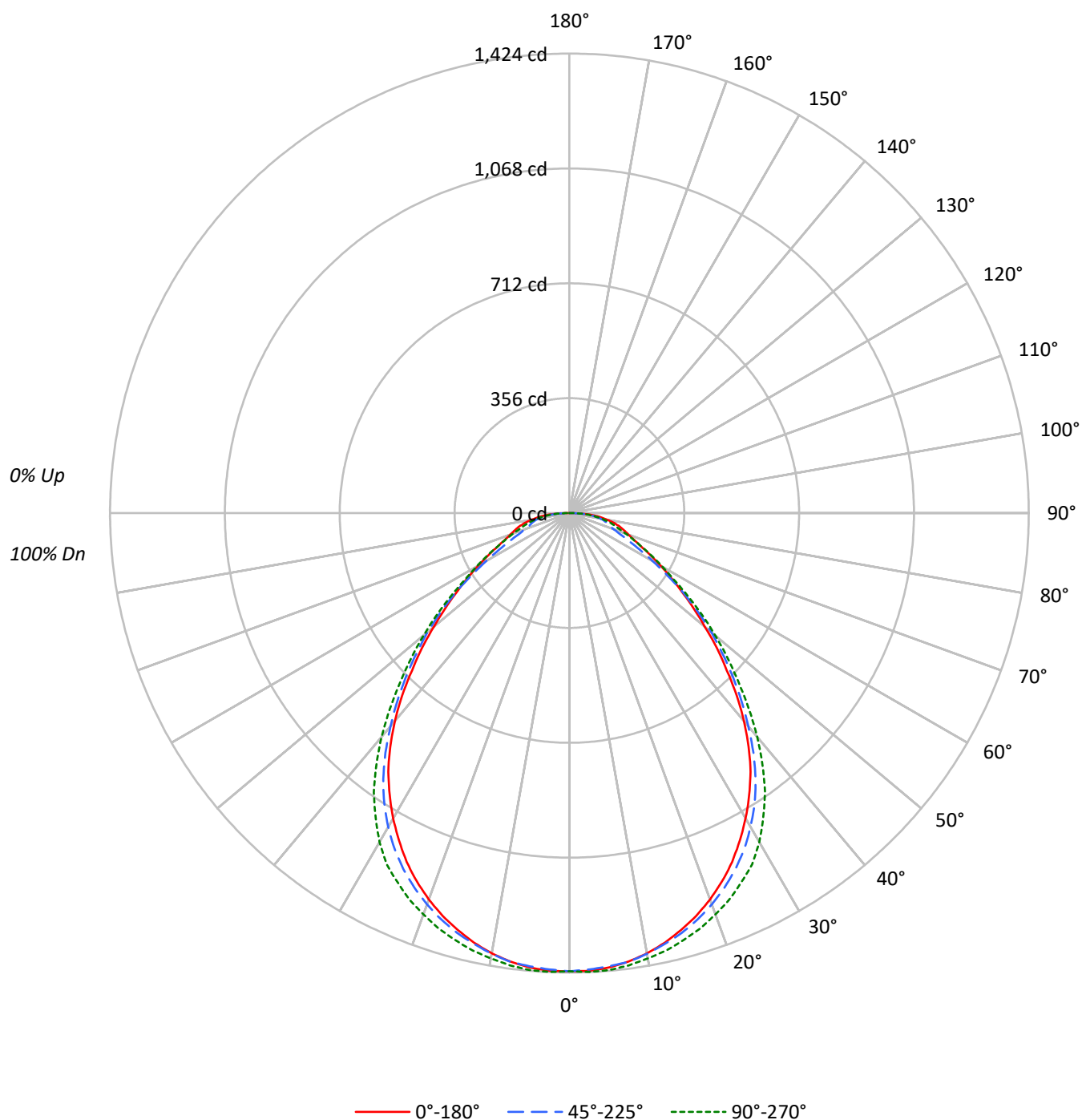
Input Watts (W): 34.56  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |  |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 |  | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 |
| 1   | 110 | 105 | 102 | 98  | 107 | 103 | 100 | 96  |  | 99  | 96  | 93  |  | 95  | 93  | 91  |  | 92  | 90  | 88  |
| 2   | 101 | 94  | 87  | 82  | 98  | 92  | 86  | 81  |  | 88  | 83  | 79  |  | 85  | 81  | 78  |  | 82  | 79  | 76  |
| 3   | 93  | 83  | 76  | 70  | 91  | 82  | 75  | 69  |  | 79  | 73  | 68  |  | 76  | 71  | 67  |  | 74  | 70  | 66  |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 60  |  | 71  | 65  | 59  |  | 69  | 63  | 59  |  | 67  | 62  | 58  |
| 5   | 80  | 68  | 59  | 53  | 78  | 67  | 59  | 53  |  | 65  | 58  | 52  |  | 63  | 57  | 52  |  | 61  | 56  | 51  |
| 6   | 74  | 61  | 53  | 47  | 72  | 61  | 53  | 47  |  | 59  | 52  | 47  |  | 57  | 51  | 46  |  | 56  | 50  | 46  |
| 7   | 69  | 56  | 48  | 42  | 67  | 55  | 48  | 42  |  | 54  | 47  | 42  |  | 52  | 46  | 41  |  | 51  | 46  | 41  |
| 8   | 64  | 52  | 44  | 38  | 63  | 51  | 43  | 38  |  | 50  | 43  | 38  |  | 48  | 42  | 38  |  | 47  | 42  | 37  |
| 9   | 60  | 48  | 40  | 35  | 59  | 47  | 40  | 34  |  | 46  | 39  | 34  |  | 45  | 39  | 34  |  | 44  | 38  | 34  |
| 10  | 57  | 44  | 37  | 32  | 55  | 44  | 36  | 32  |  | 43  | 36  | 31  |  | 42  | 36  | 31  |  | 41  | 35  | 31  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4547 | 4547 | 4547 |
| 5°  | 4544 | 4532 | 4569 |
| 10° | 4505 | 4510 | 4557 |
| 15° | 4434 | 4465 | 4541 |
| 20° | 4342 | 4398 | 4511 |
| 25° | 4216 | 4302 | 4459 |
| 30° | 4040 | 4154 | 4353 |
| 35° | 3827 | 3934 | 4133 |
| 40° | 3519 | 3606 | 3786 |
| 45° | 3126 | 3240 | 3357 |
| 50° | 2730 | 2856 | 2941 |
| 55° | 2374 | 2406 | 2495 |
| 60° | 2089 | 1914 | 2130 |
| 65° | 1856 | 1529 | 1866 |
| 70° | 1822 | 1359 | 1722 |
| 75° | 1991 | 1493 | 1760 |
| 80° | 2185 | 1774 | 1881 |
| 85° | 2613 | 2058 | 2113 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 134.2  | 4.4       |
| 10°-20°   | 380.6  | 12.4      |
| 20°-30°   | 561.8  | 18.2      |
| 30°-40°   | 628.7  | 20.4      |
| 40°-50°   | 552.1  | 17.9      |
| 50°-60°   | 390.7  | 12.7      |
| 60°-70°   | 227.4  | 7.4       |
| 70°-80°   | 141.7  | 4.6       |
| 80°-90°   | 63.4   | 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°    | 1076.6 | 34.9      |
| 0°-40°    | 1705.2 | 55.4      |
| 0°-60°    | 2648.0 | 86.0      |
| 0°-90°    | 3080.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3080.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1420 | 1420  | 1420 | 1420  | 1420 |      |
| 5°  | 1414 | 1410  | 1410 | 1417  | 1421 | 134  |
| 15° | 1337 | 1340  | 1347 | 1361  | 1370 | 377  |
| 25° | 1193 | 1198  | 1217 | 1246  | 1262 | 548  |
| 35° | 979  | 983   | 1006 | 1036  | 1057 | 609  |
| 45° | 690  | 698   | 715  | 733   | 741  | 534  |
| 55° | 425  | 434   | 431  | 439   | 447  | 384  |
| 65° | 245  | 226   | 202  | 220   | 246  | 248  |
| 75° | 161  | 139   | 121  | 124   | 142  | 168  |
| 85° | 71   | 74    | 56   | 55    | 58   | 72   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1419.9 | 1419.9 | 1419.9 | 1419.9 | 1419.9 |
| 2.5°  | 1419.9 | 1417.0 | 1415.6 | 1420.6 | 1423.5 |
| 5°    | 1413.5 | 1409.9 | 1409.9 | 1417.0 | 1421.4 |
| 7.5°  | 1402.0 | 1398.3 | 1402.7 | 1409.1 | 1413.5 |
| 10°   | 1385.4 | 1384.0 | 1386.9 | 1395.5 | 1401.2 |
| 12.5° | 1363.9 | 1364.6 | 1367.5 | 1381.2 | 1388.3 |
| 15°   | 1337.3 | 1340.2 | 1346.7 | 1361.0 | 1369.6 |
| 17.5° | 1308.6 | 1310.8 | 1320.8 | 1337.3 | 1349.5 |
| 20°   | 1274.1 | 1278.4 | 1290.6 | 1311.5 | 1323.7 |
| 22.5° | 1236.1 | 1241.1 | 1256.1 | 1281.3 | 1296.4 |
| 25°   | 1193.0 | 1198.0 | 1217.4 | 1246.1 | 1261.9 |
| 27.5° | 1144.1 | 1152.0 | 1173.6 | 1205.1 | 1226.7 |
| 30°   | 1092.4 | 1098.9 | 1123.3 | 1159.2 | 1177.2 |
| 32.5° | 1037.1 | 1045.0 | 1068.0 | 1102.4 | 1118.3 |
| 35°   | 978.9  | 983.2  | 1006.2 | 1036.4 | 1057.2 |
| 37.5° | 912.8  | 915.0  | 936.5  | 964.6  | 983.2  |
| 40°   | 841.8  | 843.2  | 862.6  | 889.2  | 905.7  |
| 42.5° | 767.8  | 768.5  | 789.3  | 809.5  | 823.8  |
| 45°   | 690.2  | 698.1  | 715.4  | 732.6  | 741.2  |
| 47.5° | 620.5  | 626.3  | 642.1  | 657.1  | 665.0  |
| 50°   | 548.0  | 562.4  | 573.2  | 581.1  | 590.4  |
| 52.5° | 485.5  | 497.8  | 500.6  | 509.9  | 517.8  |
| 55°   | 425.2  | 433.8  | 431.0  | 438.9  | 446.8  |
| 57.5° | 374.2  | 369.9  | 360.6  | 374.2  | 384.3  |
| 60°   | 326.1  | 314.6  | 298.8  | 317.5  | 332.5  |
| 62.5° | 283.0  | 264.3  | 244.9  | 263.6  | 288.7  |
| 65°   | 244.9  | 225.5  | 201.8  | 219.8  | 246.3  |
| 67.5° | 216.2  | 196.1  | 168.0  | 186.0  | 212.6  |
| 70°   | 194.6  | 173.8  | 145.1  | 160.1  | 183.9  |
| 72.5° | 177.4  | 155.1  | 130.0  | 140.1  | 160.1  |
| 75°   | 160.9  | 138.6  | 120.7  | 123.5  | 142.2  |
| 77.5° | 141.5  | 125.0  | 110.6  | 109.1  | 123.5  |
| 80°   | 118.5  | 113.5  | 96.2   | 94.1   | 102.0  |
| 82.5° | 97.7   | 95.5   | 79.0   | 76.8   | 79.7   |
| 85°   | 71.1   | 74.0   | 56.0   | 54.6   | 57.5   |
| 87.5° | 37.3   | 41.0   | 29.4   | 30.9   | 31.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)