

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: P293713

Luminaire Tested: **24GR-LD5-30-A125-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293713  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33307)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-30-A125-UNV-L82765-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A125 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3048.0 lumens  
Efficiency: N/A  
Efficacy: 150.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

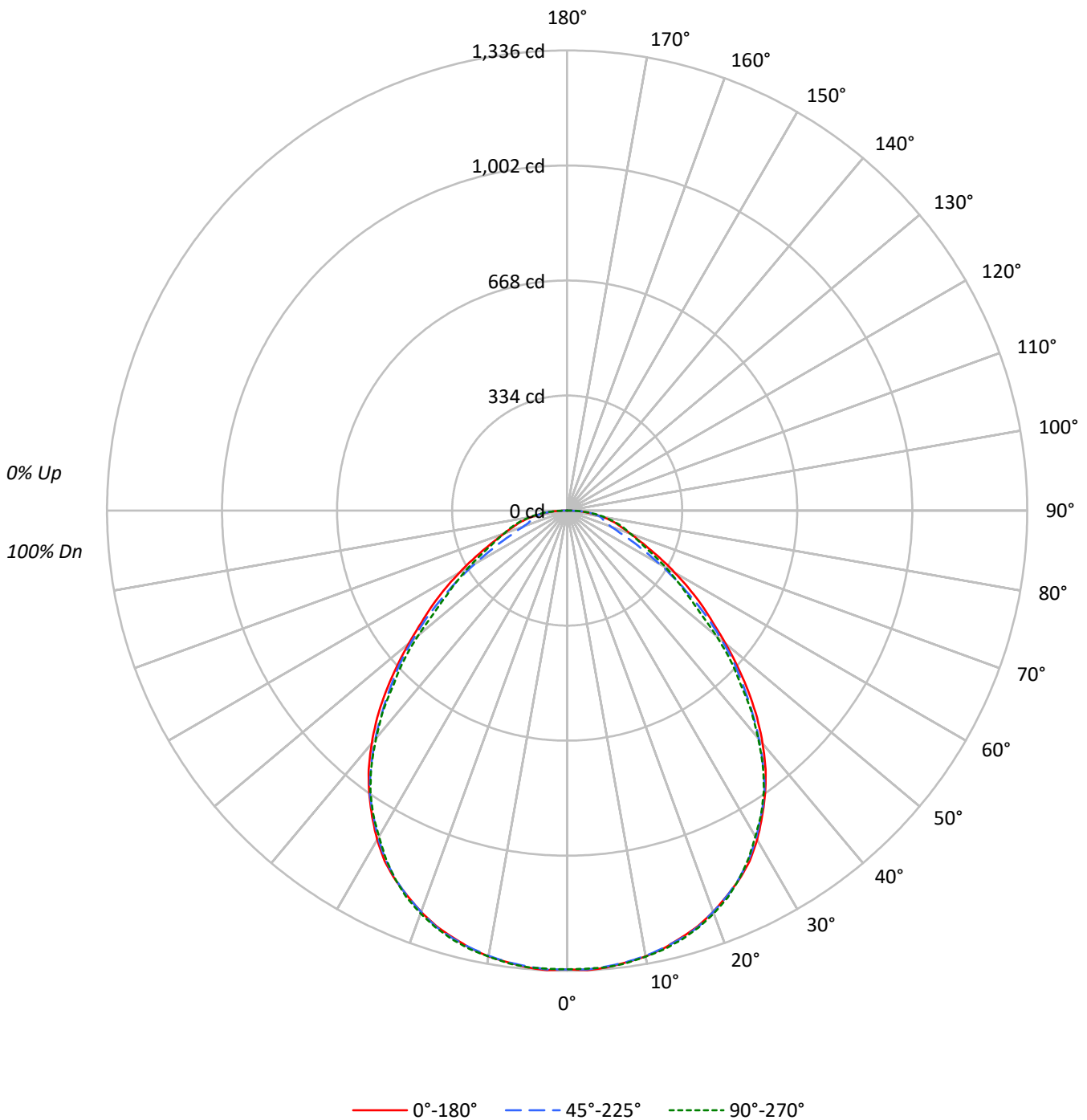
Input Watts (W): 20.274  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 98  | 107 | 103 | 100 | 96  | 99  | 96  | 93  | 95  | 93  | 90  | 91  | 90  | 88  | 86  |    |    |    |    | 86  |   |  |   |
| 2   | 101 | 93  | 87  | 82  | 98  | 91  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  |    |    |    |    | 74  |   |  |   |
| 3   | 93  | 83  | 76  | 70  | 90  | 82  | 75  | 69  | 79  | 73  | 68  | 76  | 71  | 67  | 73  | 69  | 66  | 64  |    |    |    |    | 64  |   |  |   |
| 4   | 86  | 75  | 66  | 60  | 83  | 73  | 66  | 60  | 71  | 64  | 59  | 68  | 63  | 58  | 66  | 61  | 57  | 55  |    |    |    |    | 55  |   |  |   |
| 5   | 79  | 67  | 59  | 53  | 77  | 66  | 58  | 52  | 64  | 57  | 52  | 62  | 56  | 51  | 60  | 55  | 51  | 49  |    |    |    |    | 49  |   |  |   |
| 6   | 73  | 61  | 53  | 47  | 72  | 60  | 52  | 46  | 58  | 51  | 46  | 57  | 50  | 46  | 55  | 50  | 45  | 43  |    |    |    |    | 43  |   |  |   |
| 7   | 68  | 56  | 47  | 42  | 67  | 55  | 47  | 41  | 53  | 46  | 41  | 52  | 46  | 41  | 51  | 45  | 41  | 39  |    |    |    |    | 39  |   |  |   |
| 8   | 64  | 51  | 43  | 37  | 62  | 50  | 43  | 37  | 49  | 42  | 37  | 48  | 41  | 37  | 47  | 41  | 37  | 35  |    |    |    |    | 35  |   |  |   |
| 9   | 60  | 47  | 39  | 34  | 58  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 33  | 43  | 38  | 33  | 32  |    |    |    |    | 32  |   |  |   |
| 10  | 56  | 44  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 40  | 35  | 30  | 29  |    |    |    |    | 29  |   |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1792 | 1792 | 1792 |
| 5°  | 1798 | 1794 | 1798 |
| 10° | 1796 | 1793 | 1796 |
| 15° | 1787 | 1790 | 1795 |
| 20° | 1775 | 1775 | 1782 |
| 25° | 1755 | 1751 | 1753 |
| 30° | 1714 | 1705 | 1697 |
| 35° | 1646 | 1642 | 1635 |
| 40° | 1551 | 1522 | 1516 |
| 45° | 1419 | 1380 | 1354 |
| 50° | 1254 | 1229 | 1181 |
| 55° | 1115 | 1040 | 999  |
| 60° | 971  | 832  | 892  |
| 65° | 839  | 645  | 789  |
| 70° | 765  | 528  | 763  |
| 75° | 771  | 569  | 811  |
| 80° | 804  | 741  | 855  |
| 85° | 837  | 881  | 946  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 126.3  | 4.1       |
| 10°-20°   | 362.3  | 11.9      |
| 20°-30°   | 542.4  | 17.8      |
| 30°-40°   | 619.8  | 20.3      |
| 40°-50°   | 560.3  | 18.4      |
| 50°-60°   | 403.1  | 13.2      |
| 60°-70°   | 233.7  | 7.7       |
| 70°-80°   | 138.6  | 4.5       |
| 80°-90°   | 61.4   | 2.0       |
| 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°    | 1031.1 | 33.8      |
| 0°-40°    | 1650.8 | 54.2      |
| 0°-60°    | 2614.3 | 85.8      |
| 0°-90°    | 3048.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3048.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1332 | 1332  | 1332 | 1332  | 1332 |      |
| 5°  | 1331 | 1330  | 1328 | 1327  | 1331 | 126  |
| 15° | 1283 | 1285  | 1285 | 1284  | 1289 | 362  |
| 25° | 1182 | 1181  | 1180 | 1177  | 1181 | 543  |
| 35° | 1002 | 998   | 1000 | 987   | 996  | 625  |
| 45° | 746  | 733   | 725  | 718   | 712  | 573  |
| 55° | 476  | 466   | 443  | 432   | 426  | 425  |
| 65° | 263  | 234   | 203  | 226   | 248  | 266  |
| 75° | 148  | 124   | 109  | 135   | 156  | 157  |
| 85° | 54   | 58    | 57   | 66    | 61   | 58   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1331.9 | 1331.9 | 1331.9 | 1331.9 | 1331.9 |
| 2.5°  | 1335.7 | 1330.9 | 1333.3 | 1331.9 | 1331.4 |
| 5°    | 1331.4 | 1329.5 | 1328.5 | 1326.6 | 1330.9 |
| 7.5°  | 1322.8 | 1321.4 | 1321.9 | 1322.4 | 1325.2 |
| 10°   | 1314.3 | 1311.9 | 1312.4 | 1313.3 | 1314.8 |
| 12.5° | 1301.0 | 1299.5 | 1300.0 | 1301.0 | 1304.3 |
| 15°   | 1282.9 | 1285.3 | 1285.3 | 1283.8 | 1288.6 |
| 17.5° | 1264.8 | 1264.3 | 1266.7 | 1262.4 | 1269.1 |
| 20°   | 1239.6 | 1240.1 | 1239.6 | 1240.1 | 1244.4 |
| 22.5° | 1211.1 | 1213.5 | 1212.0 | 1212.0 | 1216.8 |
| 25°   | 1182.1 | 1180.7 | 1179.7 | 1177.3 | 1180.7 |
| 27.5° | 1147.4 | 1144.5 | 1142.1 | 1137.4 | 1139.8 |
| 30°   | 1103.2 | 1103.6 | 1097.4 | 1093.2 | 1092.2 |
| 32.5° | 1053.7 | 1053.7 | 1048.0 | 1044.7 | 1047.5 |
| 35°   | 1002.3 | 997.6  | 999.5  | 987.1  | 995.7  |
| 37.5° | 946.7  | 939.1  | 934.8  | 930.5  | 933.4  |
| 40°   | 883.0  | 873.0  | 866.8  | 858.3  | 863.0  |
| 42.5° | 816.0  | 803.6  | 796.0  | 789.8  | 791.7  |
| 45°   | 745.6  | 732.7  | 725.1  | 718.5  | 711.8  |
| 47.5° | 671.4  | 663.3  | 659.5  | 651.0  | 643.3  |
| 50°   | 599.1  | 596.3  | 587.2  | 580.1  | 564.4  |
| 52.5° | 533.0  | 530.7  | 516.4  | 504.5  | 484.5  |
| 55°   | 475.5  | 466.5  | 443.2  | 431.8  | 426.0  |
| 57.5° | 417.0  | 402.3  | 374.2  | 372.8  | 376.6  |
| 60°   | 360.9  | 342.8  | 309.1  | 316.7  | 331.4  |
| 62.5° | 310.0  | 282.9  | 250.6  | 268.7  | 286.2  |
| 65°   | 263.4  | 233.9  | 202.6  | 226.3  | 247.7  |
| 67.5° | 224.9  | 195.4  | 163.1  | 195.0  | 219.7  |
| 70°   | 194.5  | 164.5  | 134.1  | 170.7  | 194.0  |
| 72.5° | 169.3  | 142.2  | 117.0  | 151.7  | 175.9  |
| 75°   | 148.4  | 124.1  | 109.4  | 135.0  | 156.0  |
| 77.5° | 127.4  | 107.9  | 104.6  | 120.3  | 133.1  |
| 80°   | 103.7  | 94.6   | 95.6   | 105.6  | 110.3  |
| 82.5° | 77.5   | 78.0   | 80.4   | 88.4   | 86.5   |
| 85°   | 54.2   | 58.5   | 57.1   | 65.6   | 61.3   |
| 87.5° | 30.0   | 32.8   | 30.9   | 37.6   | 33.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)