

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: P290804

Luminaire Tested: **14GR-LD5-24-F125-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290804  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33313)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-24-F125-UNV-L82765-W2A1-U-5700K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2516.0 lumens  
Efficiency: N/A  
Efficacy: 133.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.24  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

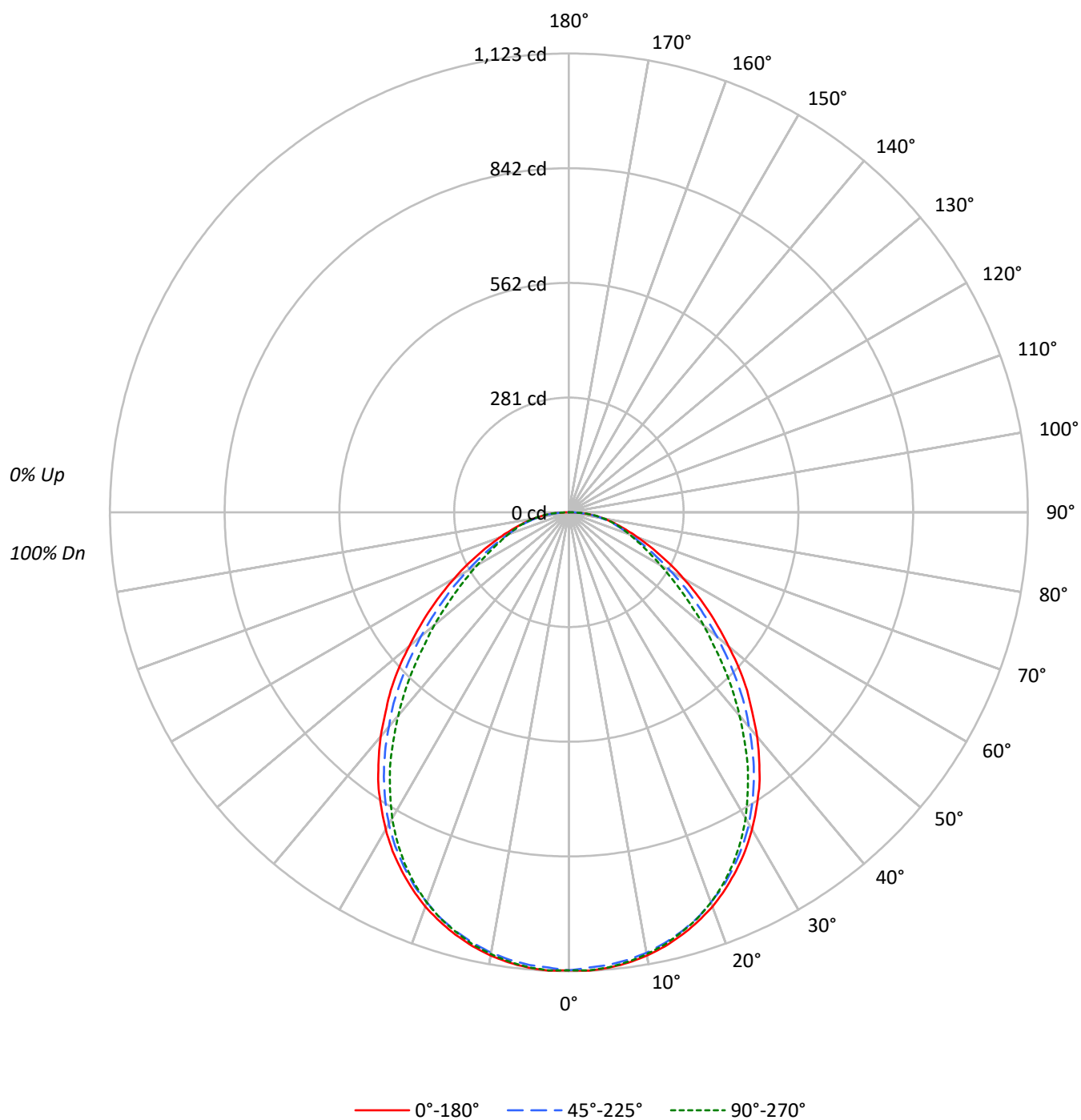
Input Watts (W): 18.786  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  |  | 95  | 92  | 90  |  | 91  |
| 2   | 101 | 93  | 87  | 81  | 98  | 91  | 85  | 80  | 88  | 83  | 78  |  | 84  | 80  | 77  |  | 81  |
| 3   | 92  | 83  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  |  | 75  | 70  | 66  |  | 73  |
| 4   | 85  | 74  | 66  | 59  | 83  | 73  | 65  | 59  | 70  | 64  | 58  |  | 68  | 62  | 58  |  | 66  |
| 5   | 79  | 67  | 58  | 52  | 77  | 66  | 58  | 52  | 64  | 57  | 51  |  | 62  | 55  | 51  |  | 60  |
| 6   | 73  | 60  | 52  | 46  | 71  | 60  | 52  | 46  | 58  | 51  | 45  |  | 56  | 50  | 45  |  | 55  |
| 7   | 68  | 55  | 47  | 41  | 66  | 54  | 47  | 41  | 53  | 46  | 41  |  | 51  | 45  | 40  |  | 50  |
| 8   | 64  | 51  | 43  | 37  | 62  | 50  | 42  | 37  | 49  | 42  | 37  |  | 47  | 41  | 36  |  | 46  |
| 9   | 60  | 47  | 39  | 34  | 58  | 46  | 39  | 33  | 45  | 38  | 33  |  | 44  | 38  | 33  |  | 43  |
| 10  | 56  | 43  | 36  | 31  | 55  | 43  | 35  | 31  | 42  | 35  | 30  |  | 41  | 35  | 30  |  | 40  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3016 | 3016 | 3016 |
| 5°  | 3023 | 3004 | 3020 |
| 10° | 3010 | 2990 | 3000 |
| 15° | 2983 | 2960 | 2965 |
| 20° | 2941 | 2909 | 2910 |
| 25° | 2874 | 2839 | 2820 |
| 30° | 2786 | 2738 | 2687 |
| 35° | 2671 | 2594 | 2508 |
| 40° | 2516 | 2408 | 2282 |
| 45° | 2346 | 2205 | 2041 |
| 50° | 2133 | 1978 | 1802 |
| 55° | 1942 | 1754 | 1571 |
| 60° | 1742 | 1545 | 1396 |
| 65° | 1553 | 1376 | 1282 |
| 70° | 1412 | 1254 | 1241 |
| 75° | 1320 | 1222 | 1283 |
| 80° | 1327 | 1263 | 1336 |
| 85° | 1386 | 1294 | 1476 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 106.0  | 4.2       |
| 10°-20°   | 300.5  | 11.9      |
| 20°-30°   | 440.5  | 17.5      |
| 30°-40°   | 491.7  | 19.5      |
| 40°-50°   | 445.2  | 17.7      |
| 50°-60°   | 336.1  | 13.4      |
| 60°-70°   | 219.7  | 8.7       |
| 70°-80°   | 129.1  | 5.1       |
| 80°-90°   | 47.2   | 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°    | 847.0  | 33.7      |
| 0°-40°    | 1338.7 | 53.2      |
| 0°-60°    | 2120.0 | 84.3      |
| 0°-90°    | 2516.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2516.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1121 | 1121  | 1121 | 1121  | 1121 |      |
| 5°  | 1119 | 1117  | 1112 | 1118  | 1118 | 106  |
| 15° | 1071 | 1069  | 1062 | 1068  | 1064 | 302  |
| 25° | 968  | 964   | 956  | 954   | 950  | 445  |
| 35° | 813  | 806   | 790  | 772   | 764  | 506  |
| 45° | 616  | 607   | 579  | 548   | 536  | 474  |
| 55° | 414  | 404   | 374  | 344   | 335  | 370  |
| 65° | 244  | 236   | 216  | 204   | 201  | 245  |
| 75° | 127  | 123   | 118  | 120   | 123  | 136  |
| 85° | 45   | 43    | 42   | 47    | 48   | 48   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 |
| 2.5°  | 1122.6 | 1120.9 | 1115.5 | 1122.6 | 1122.0 |
| 5°    | 1119.1 | 1116.7 | 1112.0 | 1118.5 | 1117.9 |
| 7.5°  | 1112.0 | 1109.6 | 1104.9 | 1110.8 | 1109.6 |
| 10°   | 1101.4 | 1099.0 | 1094.3 | 1100.8 | 1097.8 |
| 12.5° | 1087.8 | 1085.4 | 1080.1 | 1086.0 | 1083.7 |
| 15°   | 1070.7 | 1068.9 | 1062.4 | 1068.3 | 1064.2 |
| 17.5° | 1050.0 | 1047.0 | 1042.3 | 1045.9 | 1042.9 |
| 20°   | 1027.0 | 1023.4 | 1015.7 | 1019.3 | 1016.3 |
| 22.5° | 999.2  | 994.5  | 989.2  | 989.2  | 985.0  |
| 25°   | 967.9  | 964.4  | 956.1  | 954.3  | 949.6  |
| 27.5° | 934.2  | 931.3  | 920.7  | 917.7  | 909.4  |
| 30°   | 896.5  | 892.3  | 881.1  | 871.7  | 864.6  |
| 32.5° | 854.5  | 851.6  | 836.2  | 823.8  | 813.8  |
| 35°   | 813.2  | 806.1  | 789.6  | 771.8  | 763.6  |
| 37.5° | 764.8  | 759.4  | 738.8  | 716.9  | 705.7  |
| 40°   | 716.3  | 709.8  | 685.6  | 661.4  | 649.6  |
| 42.5° | 663.8  | 657.9  | 634.8  | 605.9  | 593.5  |
| 45°   | 616.5  | 607.1  | 579.3  | 548.0  | 536.2  |
| 47.5° | 564.6  | 554.5  | 525.0  | 491.9  | 478.3  |
| 50°   | 509.6  | 503.1  | 472.4  | 440.5  | 430.5  |
| 52.5° | 460.6  | 450.6  | 421.7  | 390.4  | 379.7  |
| 55°   | 414.0  | 404.5  | 373.8  | 344.3  | 334.8  |
| 57.5° | 367.3  | 356.7  | 330.1  | 303.5  | 294.1  |
| 60°   | 323.6  | 313.0  | 287.0  | 265.2  | 259.3  |
| 62.5° | 284.1  | 272.2  | 249.2  | 232.1  | 228.0  |
| 65°   | 243.9  | 236.2  | 216.1  | 203.7  | 201.4  |
| 67.5° | 210.2  | 200.8  | 184.8  | 178.9  | 177.8  |
| 70°   | 179.5  | 173.0  | 159.4  | 157.7  | 157.7  |
| 72.5° | 151.8  | 146.5  | 136.4  | 137.6  | 139.4  |
| 75°   | 127.0  | 123.4  | 117.5  | 119.9  | 123.4  |
| 77.5° | 105.7  | 102.2  | 98.6   | 102.2  | 104.5  |
| 80°   | 85.6   | 82.1   | 81.5   | 84.4   | 86.2   |
| 82.5° | 64.4   | 61.4   | 62.0   | 66.7   | 68.5   |
| 85°   | 44.9   | 43.1   | 41.9   | 47.2   | 47.8   |
| 87.5° | 23.0   | 21.9   | 21.3   | 25.4   | 24.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)