

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: P290805

Luminaire Tested: **14GR-LD5-24-F125-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290805  
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-6500K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2522.0 lumens  
Efficiency: N/A  
Efficacy: 132.3 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

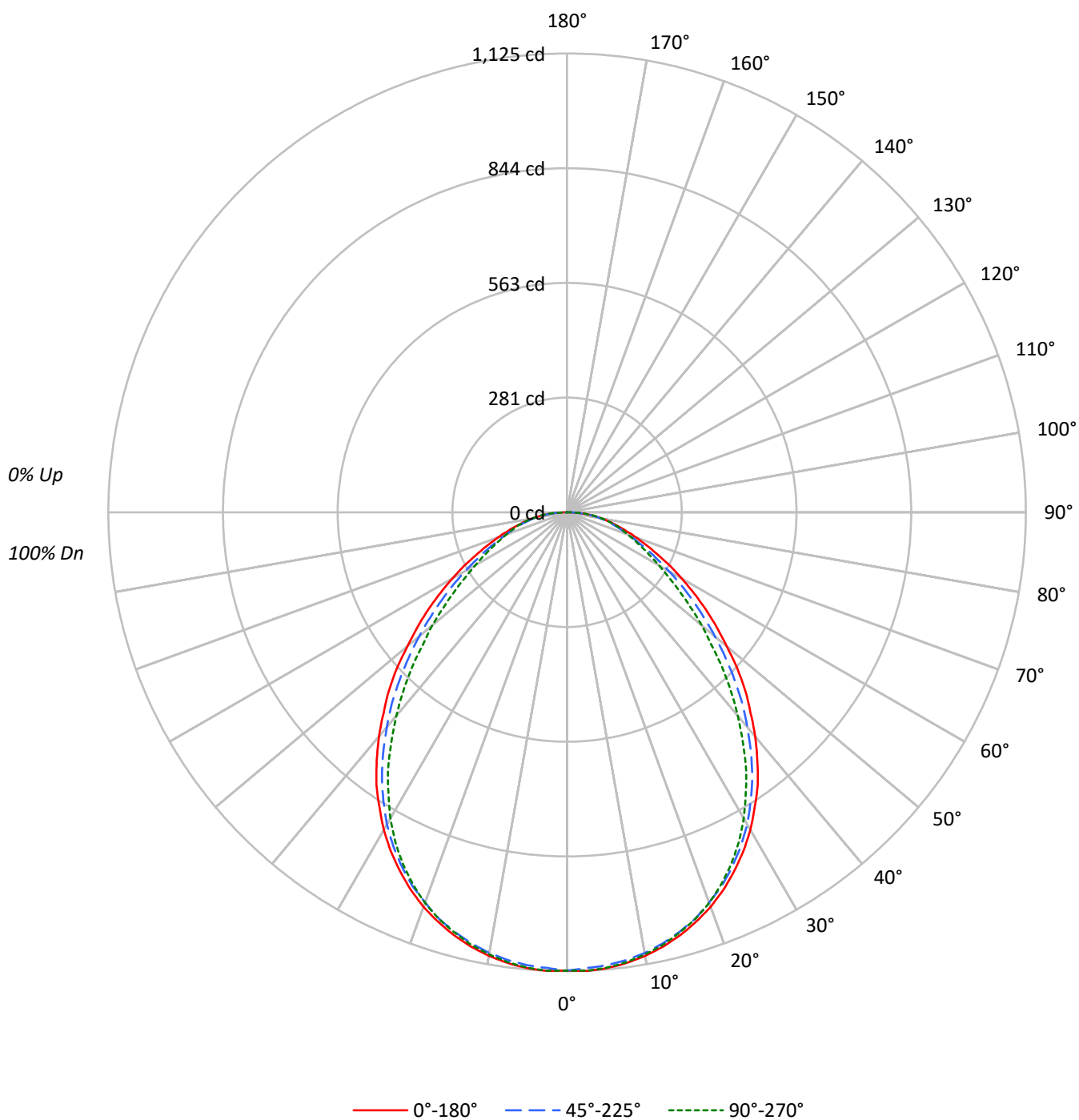
Input Watts (W): 19.065  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P290805

CATALOG NUMBER: 14GR-LD5-24-F125-UNV-L82765-W2A1-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P290805

CATALOG NUMBER: 14GR-LD5-24-F125-UNV-L82765-W2A1-U-6500K

**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°  | 3023 | 3023 | 3023 |
| 5°  | 3030 | 3011 | 3027 |
| 10° | 3017 | 2997 | 3007 |
| 15° | 2990 | 2967 | 2972 |
| 20° | 2948 | 2916 | 2918 |
| 25° | 2881 | 2846 | 2826 |
| 30° | 2792 | 2744 | 2693 |
| 35° | 2678 | 2600 | 2514 |
| 40° | 2522 | 2414 | 2288 |
| 45° | 2352 | 2210 | 2046 |
| 50° | 2139 | 1983 | 1806 |
| 55° | 1947 | 1758 | 1574 |
| 60° | 1746 | 1548 | 1399 |
| 65° | 1557 | 1380 | 1286 |
| 70° | 1416 | 1257 | 1244 |
| 75° | 1324 | 1225 | 1286 |
| 80° | 1330 | 1266 | 1339 |
| 85° | 1389 | 1297 | 1479 |



TEST NUMBER: P290805

CATALOG NUMBER: 14GR-LD5-24-F125-UNV-L82765-W2A1-U-6500K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 106.2  | 4.2       |
| 10°-20°   | 301.2  | 11.9      |
| 20°-30°   | 441.6  | 17.5      |
| 30°-40°   | 492.9  | 19.5      |
| 40°-50°   | 446.2  | 17.7      |
| 50°-60°   | 336.9  | 13.4      |
| 60°-70°   | 220.3  | 8.7       |
| 70°-80°   | 129.4  | 5.1       |
| 80°-90°   | 47.4   | 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°    | 849.0  | 33.7      |
| 0°-40°    | 1341.9 | 53.2      |
| 0°-60°    | 2125.0 | 84.3      |
| 0°-90°    | 2522.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2522.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1124 | 1124  | 1124 | 1124  | 1124 |      |
| 5°  | 1122 | 1119  | 1115 | 1121  | 1121 | 107  |
| 15° | 1073 | 1071  | 1065 | 1071  | 1067 | 302  |
| 25° | 970  | 967   | 958  | 957   | 952  | 446  |
| 35° | 815  | 808   | 791  | 774   | 765  | 508  |
| 45° | 618  | 608   | 581  | 549   | 538  | 475  |
| 55° | 415  | 406   | 375  | 345   | 336  | 371  |
| 65° | 244  | 237   | 217  | 204   | 202  | 245  |
| 75° | 127  | 124   | 118  | 120   | 124  | 137  |
| 85° | 45   | 43    | 42   | 47    | 48   | 48   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



TEST NUMBER: P290805

CATALOG NUMBER: 14GR-LD5-24-F125-UNV-L82765-W2A1-U-6500K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1123.5 | 1123.5 | 1123.5 | 1123.5 | 1123.5 |
| 2.5°  | 1125.3 | 1123.5 | 1118.2 | 1125.3 | 1124.7 |
| 5°    | 1121.8 | 1119.4 | 1114.7 | 1121.2 | 1120.6 |
| 7.5°  | 1114.7 | 1112.3 | 1107.6 | 1113.5 | 1112.3 |
| 10°   | 1104.0 | 1101.6 | 1096.9 | 1103.4 | 1100.4 |
| 12.5° | 1090.4 | 1088.0 | 1082.7 | 1088.6 | 1086.2 |
| 15°   | 1073.2 | 1071.4 | 1064.9 | 1070.9 | 1066.7 |
| 17.5° | 1052.5 | 1049.5 | 1044.8 | 1048.4 | 1045.4 |
| 20°   | 1029.4 | 1025.9 | 1018.2 | 1021.7 | 1018.8 |
| 22.5° | 1001.6 | 996.9  | 991.5  | 991.5  | 987.4  |
| 25°   | 970.2  | 966.7  | 958.4  | 956.6  | 951.9  |
| 27.5° | 936.5  | 933.5  | 922.9  | 919.9  | 911.6  |
| 30°   | 898.6  | 894.4  | 883.2  | 873.7  | 866.6  |
| 32.5° | 856.6  | 853.6  | 838.2  | 825.8  | 815.7  |
| 35°   | 815.1  | 808.0  | 791.4  | 773.7  | 765.4  |
| 37.5° | 766.6  | 761.3  | 740.5  | 718.6  | 707.4  |
| 40°   | 718.0  | 711.5  | 687.3  | 663.0  | 651.2  |
| 42.5° | 665.4  | 659.4  | 636.4  | 607.3  | 594.9  |
| 45°   | 618.0  | 608.5  | 580.7  | 549.3  | 537.5  |
| 47.5° | 565.9  | 555.8  | 526.3  | 493.1  | 479.5  |
| 50°   | 510.9  | 504.3  | 473.6  | 441.6  | 431.5  |
| 52.5° | 461.7  | 451.7  | 422.7  | 391.3  | 380.6  |
| 55°   | 415.0  | 405.5  | 374.7  | 345.1  | 335.6  |
| 57.5° | 368.2  | 357.5  | 330.9  | 304.3  | 294.8  |
| 60°   | 324.4  | 313.7  | 287.7  | 265.8  | 259.9  |
| 62.5° | 284.7  | 272.9  | 249.8  | 232.6  | 228.5  |
| 65°   | 244.5  | 236.8  | 216.7  | 204.2  | 201.9  |
| 67.5° | 210.7  | 201.3  | 185.3  | 179.4  | 178.2  |
| 70°   | 180.0  | 173.4  | 159.8  | 158.1  | 158.1  |
| 72.5° | 152.1  | 146.8  | 136.7  | 137.9  | 139.7  |
| 75°   | 127.3  | 123.7  | 117.8  | 120.2  | 123.7  |
| 77.5° | 106.0  | 102.4  | 98.9   | 102.4  | 104.8  |
| 80°   | 85.8   | 82.3   | 81.7   | 84.6   | 86.4   |
| 82.5° | 64.5   | 61.6   | 62.2   | 66.9   | 68.7   |
| 85°   | 45.0   | 43.2   | 42.0   | 47.4   | 47.9   |
| 87.5° | 23.1   | 21.9   | 21.3   | 25.5   | 24.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)