

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: P290819

Luminaire Tested: **14GR-LD5-32-F125-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290819  
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-LD5-32-F125-UNV-L82765-W2A1-U-4500K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3322.0 lumens  
Efficiency: N/A  
Efficacy: 127.1 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

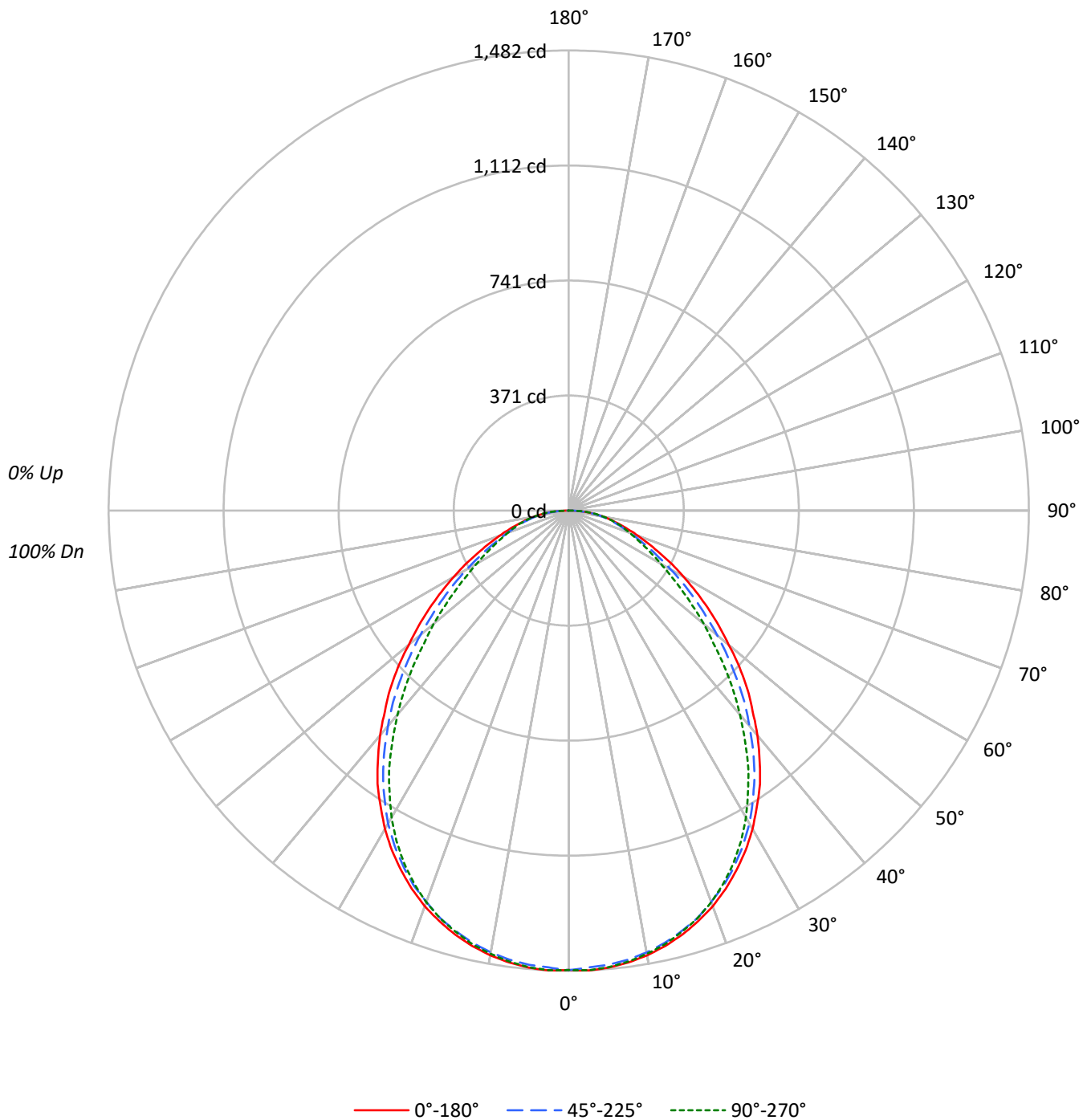
Input Watts (W): 26.133  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P290819

CATALOG NUMBER: 14GR-LD5-32-F125-UNV-L82765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P290819

CATALOG NUMBER: 14GR-LD5-32-F125-UNV-L82765-W2A1-U-4500K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |  |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|-----|-----|--|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     |  | 20  |     |     |  |     | 20  |     |  |     |     | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     |  | 50  |     |     |  |     | 30  |     |  |     |     | 0   |
| 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 | 101 | 98  | 107 | 103 | 99  | 96  |  | 99  | 96  | 93  |  | 95  | 92  | 90  |  | 91  | 89  | 88  |
| 2   | 101 | 93  | 87  | 81  | 98  | 91  | 85  | 80  |  | 88  | 83  | 78  |  | 84  | 80  | 77  |  | 81  | 78  | 75  |
| 3   | 92  | 83  | 75  | 69  | 90  | 81  | 74  | 68  |  | 78  | 72  | 67  |  | 75  | 70  | 66  |  | 73  | 69  | 65  |
| 4   | 85  | 74  | 66  | 59  | 83  | 73  | 65  | 59  |  | 70  | 64  | 58  |  | 68  | 62  | 58  |  | 66  | 61  | 57  |
| 5   | 79  | 67  | 58  | 52  | 77  | 66  | 58  | 52  |  | 64  | 57  | 51  |  | 62  | 55  | 51  |  | 60  | 54  | 50  |
| 6   | 73  | 60  | 52  | 46  | 71  | 60  | 52  | 46  |  | 58  | 51  | 45  |  | 56  | 50  | 45  |  | 55  | 49  | 45  |
| 7   | 68  | 55  | 47  | 41  | 66  | 54  | 47  | 41  |  | 53  | 46  | 41  |  | 51  | 45  | 40  |  | 50  | 44  | 40  |
| 8   | 64  | 51  | 43  | 37  | 62  | 50  | 42  | 37  |  | 49  | 42  | 37  |  | 47  | 41  | 36  |  | 46  | 41  | 36  |
| 9   | 60  | 47  | 39  | 34  | 58  | 46  | 39  | 33  |  | 45  | 38  | 33  |  | 44  | 38  | 33  |  | 43  | 37  | 33  |
| 10  | 56  | 43  | 36  | 31  | 55  | 43  | 35  | 31  |  | 42  | 35  | 30  |  | 41  | 35  | 30  |  | 40  | 34  | 30  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3982 | 3982 | 3982 |
| 5°  | 3991 | 3966 | 3987 |
| 10° | 3974 | 3948 | 3961 |
| 15° | 3938 | 3908 | 3914 |
| 20° | 3883 | 3840 | 3843 |
| 25° | 3795 | 3748 | 3723 |
| 30° | 3678 | 3615 | 3547 |
| 35° | 3527 | 3425 | 3312 |
| 40° | 3322 | 3180 | 3013 |
| 45° | 3098 | 2911 | 2694 |
| 50° | 2817 | 2611 | 2380 |
| 55° | 2564 | 2316 | 2074 |
| 60° | 2300 | 2039 | 1842 |
| 65° | 2050 | 1817 | 1693 |
| 70° | 1865 | 1656 | 1638 |
| 75° | 1743 | 1614 | 1695 |
| 80° | 1753 | 1667 | 1764 |
| 85° | 1831 | 1711 | 1951 |



TEST NUMBER: P290819

CATALOG NUMBER: 14GR-LD5-32-F125-UNV-L82765-W2A1-U-4500K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 139.9  | 4.2       |
| 10°-20°   | 396.7  | 11.9      |
| 20°-30°   | 581.7  | 17.5      |
| 30°-40°   | 649.2  | 19.5      |
| 40°-50°   | 587.8  | 17.7      |
| 50°-60°   | 443.8  | 13.4      |
| 60°-70°   | 290.1  | 8.7       |
| 70°-80°   | 170.4  | 5.1       |
| 80°-90°   | 62.4   | 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°    | 1118.3 | 33.7      |
| 0°-40°    | 1767.5 | 53.2      |
| 0°-60°    | 2799.1 | 84.3      |
| 0°-90°    | 3322.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3322.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1480 | 1480  | 1480 | 1480  | 1480 |      |
| 5°  | 1478 | 1474  | 1468 | 1477  | 1476 | 140  |
| 15° | 1414 | 1411  | 1403 | 1410  | 1405 | 398  |
| 25° | 1278 | 1273  | 1262 | 1260  | 1254 | 588  |
| 35° | 1074 | 1064  | 1042 | 1019  | 1008 | 669  |
| 45° | 814  | 802   | 765  | 724   | 708  | 625  |
| 55° | 547  | 534   | 494  | 455   | 442  | 489  |
| 65° | 322  | 312   | 285  | 269   | 266  | 323  |
| 75° | 168  | 163   | 155  | 158   | 163  | 180  |
| 85° | 59   | 57    | 55   | 62    | 63   | 63   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



TEST NUMBER: P290819

CATALOG NUMBER: 14GR-LD5-32-F125-UNV-L82765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1479.9 | 1479.9 | 1479.9 | 1479.9 | 1479.9 |
| 2.5°  | 1482.3 | 1479.9 | 1472.9 | 1482.3 | 1481.5 |
| 5°    | 1477.6 | 1474.5 | 1468.2 | 1476.8 | 1476.0 |
| 7.5°  | 1468.2 | 1465.1 | 1458.9 | 1466.7 | 1465.1 |
| 10°   | 1454.2 | 1451.1 | 1444.8 | 1453.4 | 1449.5 |
| 12.5° | 1436.3 | 1433.1 | 1426.1 | 1433.9 | 1430.8 |
| 15°   | 1413.7 | 1411.3 | 1402.7 | 1410.5 | 1405.1 |
| 17.5° | 1386.4 | 1382.5 | 1376.2 | 1380.9 | 1377.0 |
| 20°   | 1356.0 | 1351.3 | 1341.1 | 1345.8 | 1341.9 |
| 22.5° | 1319.3 | 1313.1 | 1306.0 | 1306.0 | 1300.6 |
| 25°   | 1278.0 | 1273.3 | 1262.4 | 1260.0 | 1253.8 |
| 27.5° | 1233.5 | 1229.6 | 1215.6 | 1211.7 | 1200.8 |
| 30°   | 1183.6 | 1178.2 | 1163.4 | 1150.9 | 1141.5 |
| 32.5° | 1128.3 | 1124.4 | 1104.1 | 1087.7 | 1074.5 |
| 35°   | 1073.7 | 1064.3 | 1042.5 | 1019.1 | 1008.2 |
| 37.5° | 1009.8 | 1002.7 | 975.4  | 946.6  | 931.8  |
| 40°   | 945.8  | 937.2  | 905.3  | 873.3  | 857.7  |
| 42.5° | 876.4  | 868.6  | 838.2  | 800.0  | 783.6  |
| 45°   | 814.0  | 801.6  | 764.9  | 723.6  | 708.0  |
| 47.5° | 745.4  | 732.2  | 693.2  | 649.5  | 631.6  |
| 50°   | 672.9  | 664.3  | 623.8  | 581.7  | 568.4  |
| 52.5° | 608.2  | 594.9  | 556.7  | 515.4  | 501.4  |
| 55°   | 546.6  | 534.1  | 493.6  | 454.6  | 442.1  |
| 57.5° | 485.0  | 471.0  | 435.9  | 400.8  | 388.3  |
| 60°   | 427.3  | 413.3  | 378.9  | 350.1  | 342.3  |
| 62.5° | 375.1  | 359.5  | 329.0  | 306.4  | 301.0  |
| 65°   | 322.0  | 311.9  | 285.4  | 269.0  | 265.9  |
| 67.5° | 277.6  | 265.1  | 244.1  | 236.3  | 234.7  |
| 70°   | 237.0  | 228.5  | 210.5  | 208.2  | 208.2  |
| 72.5° | 200.4  | 193.4  | 180.1  | 181.7  | 184.0  |
| 75°   | 167.6  | 163.0  | 155.2  | 158.3  | 163.0  |
| 77.5° | 139.6  | 134.9  | 130.2  | 134.9  | 138.0  |
| 80°   | 113.1  | 108.4  | 107.6  | 111.5  | 113.8  |
| 82.5° | 85.0   | 81.1   | 81.9   | 88.1   | 90.4   |
| 85°   | 59.3   | 56.9   | 55.4   | 62.4   | 63.2   |
| 87.5° | 30.4   | 28.9   | 28.1   | 33.5   | 32.0   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)