

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: P290834

Luminaire Tested: **14GR-LD5-40-F125-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290834  
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-LD5-40-F125-UNV-L82765-W2A1-U-3000K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3861.0 lumens  
Efficiency: N/A  
Efficacy: 115.6 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

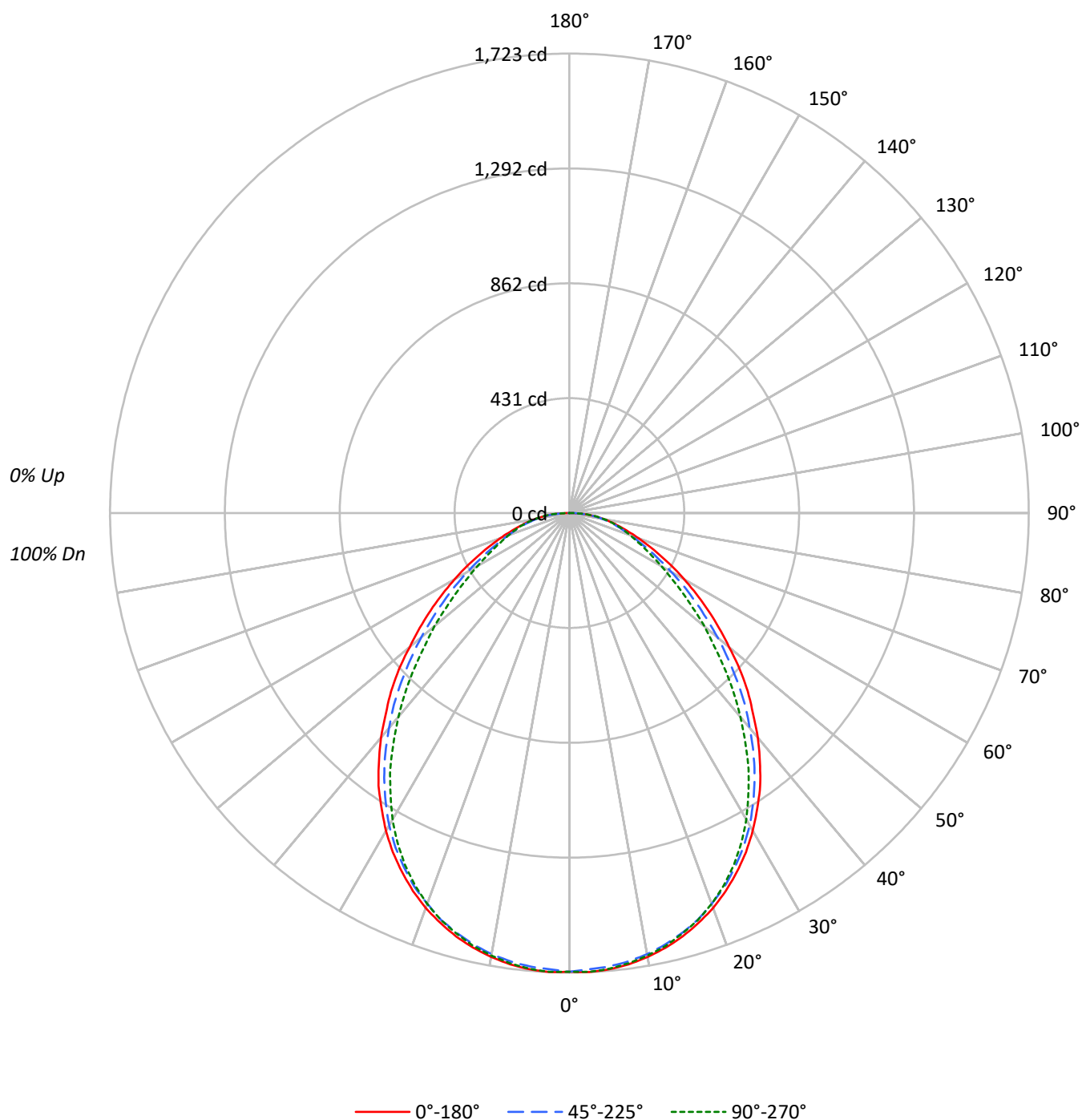
Input Watts (W): 33.387  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°  | 4629 | 4629 | 4629 |
| 5°  | 4639 | 4610 | 4634 |
| 10° | 4618 | 4589 | 4603 |
| 15° | 4577 | 4542 | 4550 |
| 20° | 4513 | 4464 | 4466 |
| 25° | 4410 | 4356 | 4327 |
| 30° | 4275 | 4201 | 4122 |
| 35° | 4099 | 3980 | 3849 |
| 40° | 3862 | 3696 | 3502 |
| 45° | 3600 | 3383 | 3132 |
| 50° | 3274 | 3035 | 2766 |
| 55° | 2981 | 2692 | 2411 |
| 60° | 2673 | 2370 | 2141 |
| 65° | 2383 | 2112 | 1968 |
| 70° | 2168 | 1925 | 1904 |
| 75° | 2025 | 1875 | 1969 |
| 80° | 2036 | 1939 | 2050 |
| 85° | 2127 | 1985 | 2266 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 162.7  | 4.2       |
| 10°-20°   | 461.1  | 11.9      |
| 20°-30°   | 676.0  | 17.5      |
| 30°-40°   | 754.5  | 19.5      |
| 40°-50°   | 683.1  | 17.7      |
| 50°-60°   | 515.8  | 13.4      |
| 60°-70°   | 337.2  | 8.7       |
| 70°-80°   | 198.0  | 5.1       |
| 80°-90°   | 72.5   | 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°    | 1299.8 | 33.7      |
| 0°-40°    | 2054.3 | 53.2      |
| 0°-60°    | 3253.3 | 84.3      |
| 0°-90°    | 3861.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3861.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1720 | 1720  | 1720 | 1720  | 1720 |      |
| 5°  | 1717 | 1714  | 1706 | 1716  | 1716 | 163  |
| 15° | 1643 | 1640  | 1630 | 1639  | 1633 | 463  |
| 25° | 1485 | 1480  | 1467 | 1464  | 1457 | 683  |
| 35° | 1248 | 1237  | 1212 | 1184  | 1172 | 777  |
| 45° | 946  | 932   | 889  | 841   | 823  | 727  |
| 55° | 635  | 621   | 574  | 528   | 514  | 568  |
| 65° | 374  | 362   | 332  | 313   | 309  | 375  |
| 75° | 195  | 189   | 180  | 184   | 189  | 209  |
| 85° | 69   | 66    | 64   | 72    | 73   | 73   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1720.1 | 1720.1 | 1720.1 | 1720.1 | 1720.1 |
| 2.5°  | 1722.8 | 1720.1 | 1711.9 | 1722.8 | 1721.9 |
| 5°    | 1717.3 | 1713.7 | 1706.5 | 1716.4 | 1715.5 |
| 7.5°  | 1706.5 | 1702.8 | 1695.6 | 1704.6 | 1702.8 |
| 10°   | 1690.1 | 1686.5 | 1679.3 | 1689.2 | 1684.7 |
| 12.5° | 1669.3 | 1665.7 | 1657.5 | 1666.6 | 1663.0 |
| 15°   | 1643.0 | 1640.3 | 1630.3 | 1639.4 | 1633.1 |
| 17.5° | 1611.3 | 1606.8 | 1599.5 | 1605.0 | 1600.4 |
| 20°   | 1576.0 | 1570.5 | 1558.7 | 1564.2 | 1559.6 |
| 22.5° | 1533.4 | 1526.1 | 1518.0 | 1518.0 | 1511.6 |
| 25°   | 1485.3 | 1479.9 | 1467.2 | 1464.5 | 1457.2 |
| 27.5° | 1433.7 | 1429.1 | 1412.8 | 1408.3 | 1395.6 |
| 30°   | 1375.7 | 1369.3 | 1352.1 | 1337.6 | 1326.7 |
| 32.5° | 1311.3 | 1306.8 | 1283.2 | 1264.2 | 1248.8 |
| 35°   | 1247.9 | 1237.0 | 1211.6 | 1184.5 | 1171.8 |
| 37.5° | 1173.6 | 1165.4 | 1133.7 | 1100.2 | 1083.0 |
| 40°   | 1099.3 | 1089.3 | 1052.1 | 1015.0 | 996.9  |
| 42.5° | 1018.6 | 1009.6 | 974.2  | 929.8  | 910.8  |
| 45°   | 946.1  | 931.6  | 889.0  | 841.0  | 822.9  |
| 47.5° | 866.4  | 851.0  | 805.7  | 754.9  | 734.1  |
| 50°   | 782.1  | 772.1  | 725.0  | 676.1  | 660.7  |
| 52.5° | 706.9  | 691.5  | 647.1  | 599.0  | 582.7  |
| 55°   | 635.3  | 620.8  | 573.7  | 528.3  | 513.8  |
| 57.5° | 563.7  | 547.4  | 506.6  | 465.8  | 451.3  |
| 60°   | 496.6  | 480.3  | 440.4  | 406.9  | 397.8  |
| 62.5° | 435.9  | 417.8  | 382.4  | 356.2  | 349.8  |
| 65°   | 374.3  | 362.5  | 331.7  | 312.7  | 309.0  |
| 67.5° | 322.6  | 308.1  | 283.7  | 274.6  | 272.8  |
| 70°   | 275.5  | 265.5  | 244.7  | 242.0  | 242.0  |
| 72.5° | 232.9  | 224.7  | 209.3  | 211.2  | 213.9  |
| 75°   | 194.8  | 189.4  | 180.3  | 184.0  | 189.4  |
| 77.5° | 162.2  | 156.8  | 151.3  | 156.8  | 160.4  |
| 80°   | 131.4  | 126.0  | 125.1  | 129.6  | 132.3  |
| 82.5° | 98.8   | 94.2   | 95.2   | 102.4  | 105.1  |
| 85°   | 68.9   | 66.2   | 64.3   | 72.5   | 73.4   |
| 87.5° | 35.3   | 33.5   | 32.6   | 39.0   | 37.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)