

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: P291219

Luminaire Tested: **14GR-LD5-36-A125-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291219  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33315)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-36-A125-UNV-L82765-W2A1-U-4000K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH A125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3691.0 lumens  
Efficiency: N/A  
Efficacy: 124.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

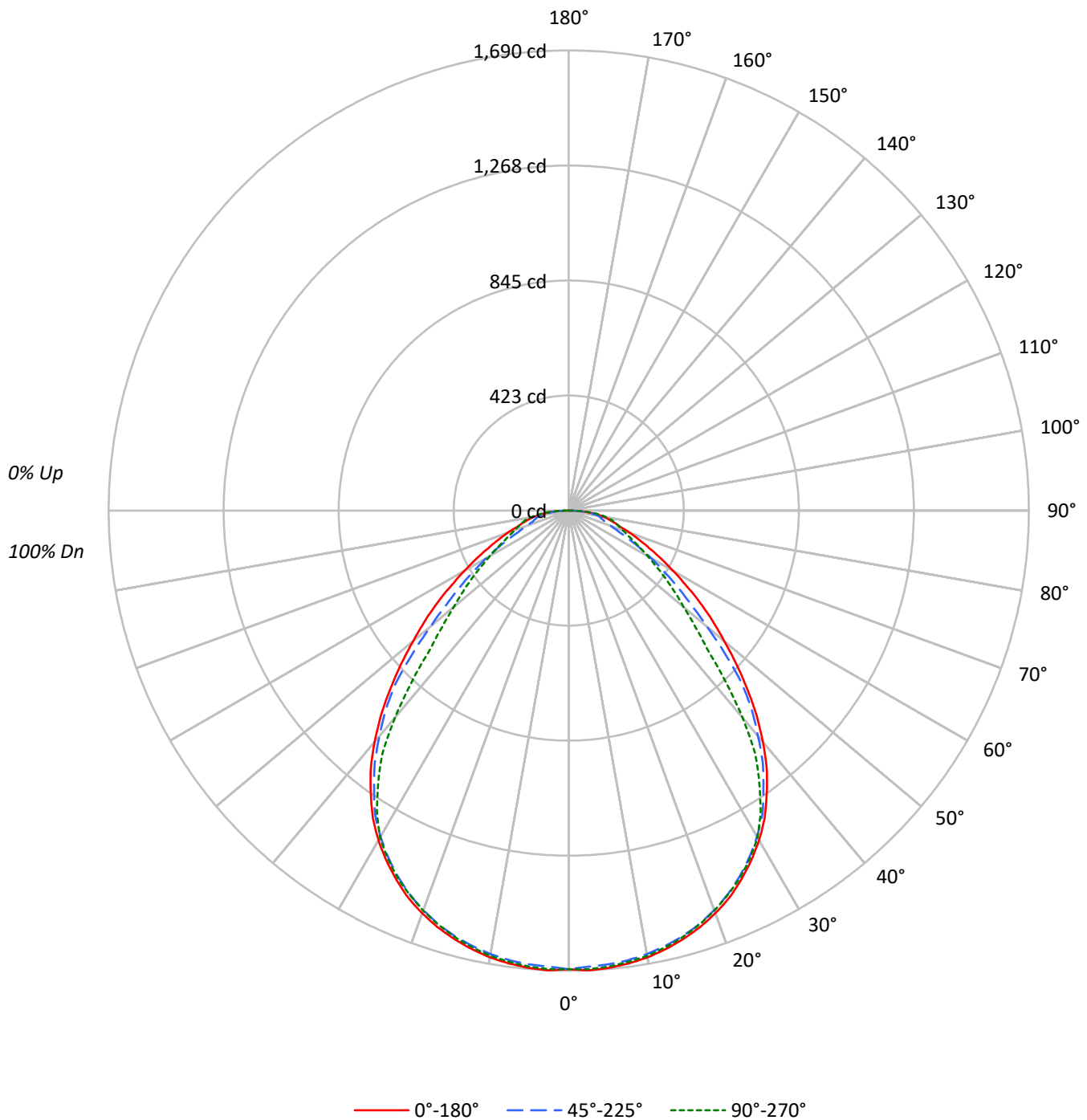
Input Watts (W): 29.667  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |     |     |  |  | 0  |
| RW  | 70  | 50  | 30  | 10  | 70  | 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 |  |  |    |
| 1   | 110 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  | 95  | 93  | 91  | 92  | 90  | 88  | 86  |  |  |    |
| 2   | 101 | 94  | 88  | 82  | 99  | 92  | 86  | 82  | 88  | 84  | 80  | 85  | 81  | 78  | 82  | 79  | 76  | 74  |  |  |    |
| 3   | 93  | 84  | 76  | 70  | 91  | 82  | 75  | 70  | 79  | 73  | 69  | 77  | 72  | 67  | 74  | 70  | 66  | 64  |  |  |    |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 61  | 71  | 65  | 60  | 69  | 64  | 59  | 67  | 62  | 58  | 56  |  |  |    |
| 5   | 80  | 68  | 60  | 54  | 78  | 67  | 59  | 53  | 65  | 58  | 53  | 63  | 57  | 52  | 61  | 56  | 52  | 50  |  |  |    |
| 6   | 74  | 62  | 54  | 48  | 72  | 61  | 53  | 47  | 59  | 52  | 47  | 58  | 51  | 47  | 56  | 51  | 46  | 44  |  |  |    |
| 7   | 69  | 56  | 48  | 43  | 67  | 56  | 48  | 42  | 54  | 47  | 42  | 53  | 47  | 42  | 52  | 46  | 42  | 40  |  |  |    |
| 8   | 65  | 52  | 44  | 38  | 63  | 51  | 44  | 38  | 50  | 43  | 38  | 49  | 42  | 38  | 48  | 42  | 38  | 36  |  |  |    |
| 9   | 60  | 48  | 40  | 35  | 59  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 34  | 44  | 38  | 34  | 33  |  |  |    |
| 10  | 57  | 44  | 37  | 32  | 56  | 44  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 32  | 41  | 35  | 31  | 30  |  |  |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4532 | 4532 | 4532 |
| 5°  | 4554 | 4520 | 4541 |
| 10° | 4553 | 4518 | 4537 |
| 15° | 4537 | 4509 | 4516 |
| 20° | 4507 | 4473 | 4478 |
| 25° | 4447 | 4406 | 4419 |
| 30° | 4345 | 4297 | 4308 |
| 35° | 4166 | 4096 | 4008 |
| 40° | 3895 | 3799 | 3486 |
| 45° | 3526 | 3425 | 2734 |
| 50° | 3119 | 2771 | 2305 |
| 55° | 2760 | 2278 | 2033 |
| 60° | 2383 | 1885 | 1802 |
| 65° | 2072 | 1500 | 1657 |
| 70° | 1873 | 1287 | 1657 |
| 75° | 1799 | 1344 | 1852 |
| 80° | 2004 | 1712 | 2163 |
| 85° | 2115 | 1825 | 2590 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 159.8  | 4.3       |
| 10°-20°   | 457.9  | 12.4      |
| 20°-30°   | 685.2  | 18.6      |
| 30°-40°   | 775.7  | 21.0      |
| 40°-50°   | 660.7  | 17.9      |
| 50°-60°   | 447.3  | 12.1      |
| 60°-70°   | 267.1  | 7.2       |
| 70°-80°   | 166.9  | 4.5       |
| 80°-90°   | 70.5   | 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°    | 1302.8 | 35.3      |
| 0°-40°    | 2078.5 | 56.3      |
| 0°-60°    | 3186.5 | 86.3      |
| 0°-90°    | 3691.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3691.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1684 | 1684  | 1684 | 1684  | 1684 |      |
| 5°  | 1686 | 1682  | 1673 | 1684  | 1681 | 160  |
| 15° | 1629 | 1623  | 1618 | 1629  | 1621 | 459  |
| 25° | 1498 | 1493  | 1484 | 1491  | 1488 | 689  |
| 35° | 1268 | 1260  | 1247 | 1234  | 1220 | 790  |
| 45° | 926  | 929   | 900  | 767   | 718  | 715  |
| 55° | 588  | 556   | 486  | 433   | 433  | 526  |
| 65° | 325  | 271   | 236  | 252   | 260  | 328  |
| 75° | 173  | 155   | 129  | 170   | 178  | 187  |
| 85° | 68   | 63    | 59   | 74    | 84   | 73   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3 |
| 2.5°  | 1690.3 | 1686.0 | 1676.6 | 1687.7 | 1686.0 |
| 5°    | 1686.0 | 1681.8 | 1673.2 | 1683.5 | 1680.9 |
| 7.5°  | 1677.5 | 1673.2 | 1665.5 | 1675.8 | 1671.5 |
| 10°   | 1666.3 | 1661.2 | 1653.5 | 1664.6 | 1660.3 |
| 12.5° | 1649.2 | 1644.1 | 1637.2 | 1648.4 | 1642.4 |
| 15°   | 1628.7 | 1622.7 | 1618.4 | 1628.7 | 1621.0 |
| 17.5° | 1603.8 | 1598.7 | 1592.7 | 1603.0 | 1594.4 |
| 20°   | 1573.9 | 1569.6 | 1561.9 | 1567.9 | 1563.6 |
| 22.5° | 1539.6 | 1533.6 | 1525.9 | 1532.8 | 1526.8 |
| 25°   | 1497.6 | 1493.4 | 1483.9 | 1490.8 | 1488.2 |
| 27.5° | 1449.7 | 1447.1 | 1436.0 | 1444.6 | 1440.3 |
| 30°   | 1398.3 | 1391.5 | 1382.9 | 1385.5 | 1386.3 |
| 32.5° | 1339.2 | 1330.7 | 1323.8 | 1317.8 | 1311.8 |
| 35°   | 1268.2 | 1260.5 | 1246.8 | 1233.9 | 1220.2 |
| 37.5° | 1194.5 | 1184.2 | 1170.5 | 1142.3 | 1125.2 |
| 40°   | 1108.9 | 1103.8 | 1081.5 | 1042.1 | 992.4  |
| 42.5° | 1021.6 | 1016.4 | 996.7  | 908.5  | 854.6  |
| 45°   | 926.5  | 929.1  | 900.0  | 767.2  | 718.4  |
| 47.5° | 835.7  | 842.6  | 779.2  | 655.1  | 629.4  |
| 50°   | 745.0  | 752.7  | 661.9  | 566.0  | 550.6  |
| 52.5° | 665.3  | 659.3  | 564.3  | 496.6  | 489.8  |
| 55°   | 588.3  | 555.7  | 485.5  | 433.3  | 433.3  |
| 57.5° | 509.5  | 463.3  | 412.7  | 379.3  | 379.3  |
| 60°   | 442.7  | 385.3  | 350.2  | 328.0  | 334.8  |
| 62.5° | 381.0  | 320.3  | 290.3  | 286.0  | 294.6  |
| 65°   | 325.4  | 271.4  | 235.5  | 251.7  | 260.3  |
| 67.5° | 280.0  | 232.1  | 193.5  | 227.8  | 232.9  |
| 70°   | 238.0  | 202.1  | 163.6  | 209.8  | 210.6  |
| 72.5° | 199.5  | 178.1  | 140.4  | 190.1  | 193.5  |
| 75°   | 173.0  | 155.0  | 129.3  | 169.5  | 178.1  |
| 77.5° | 151.6  | 132.7  | 119.0  | 146.4  | 162.7  |
| 80°   | 129.3  | 108.7  | 110.5  | 123.3  | 139.6  |
| 82.5° | 99.3   | 83.9   | 87.3   | 101.0  | 113.9  |
| 85°   | 68.5   | 63.4   | 59.1   | 74.5   | 83.9   |
| 87.5° | 36.8   | 34.3   | 30.0   | 42.0   | 42.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)