

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: P291240

Luminaire Tested: **14GR-LD5-43-A125-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291240  
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-LD5-43-A125-UNV-L82765-W2A1-U-5500K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH A125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4590.0 lumens  
Efficiency: N/A  
Efficacy: 122.2 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

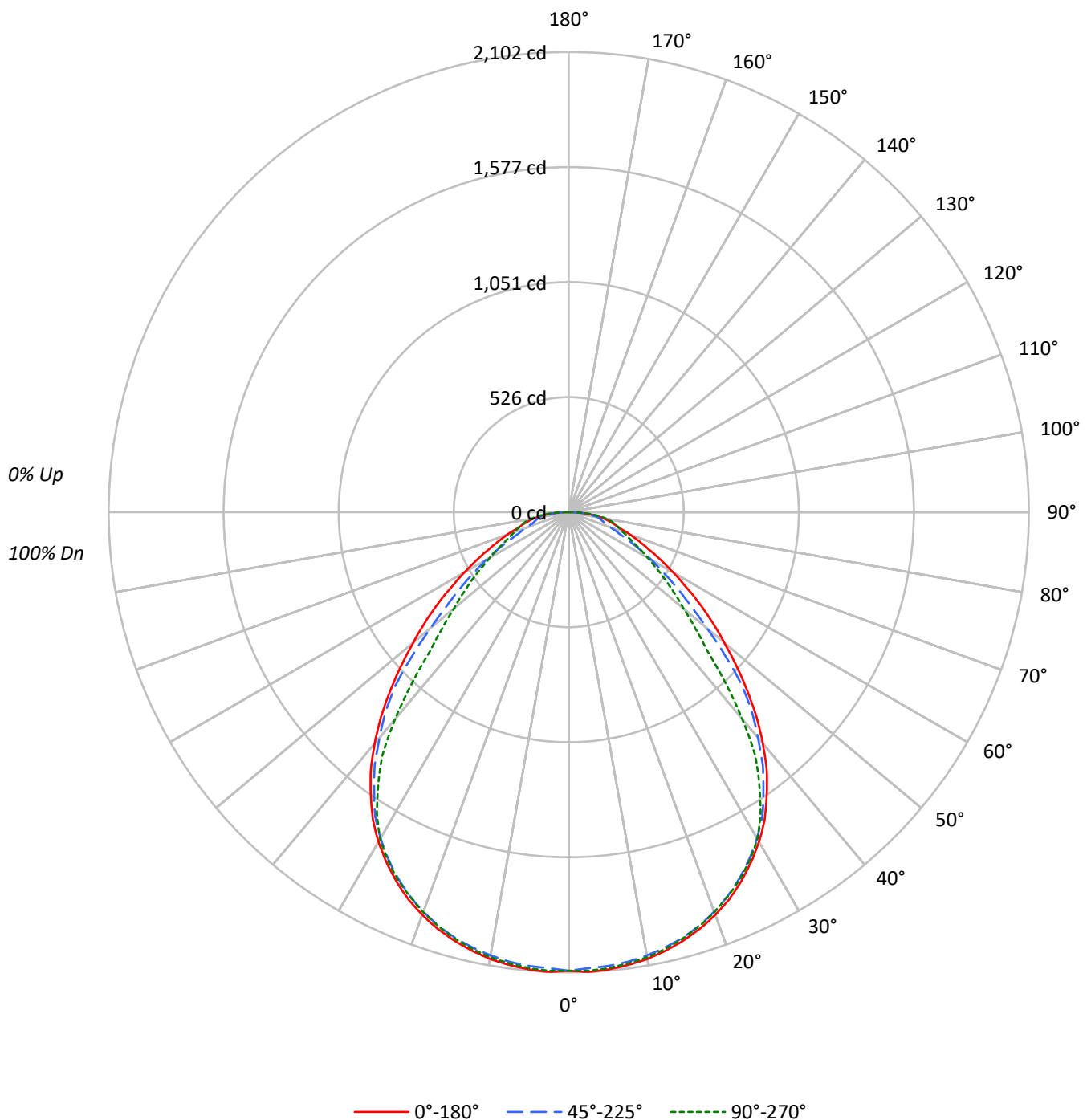
Input Watts (W): 37.572  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 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 | 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°  | 5637 | 5637 | 5637 |
| 5°  | 5664 | 5621 | 5646 |
| 10° | 5662 | 5619 | 5642 |
| 15° | 5642 | 5607 | 5616 |
| 20° | 5605 | 5562 | 5568 |
| 25° | 5530 | 5479 | 5495 |
| 30° | 5403 | 5344 | 5357 |
| 35° | 5181 | 5093 | 4985 |
| 40° | 4844 | 4724 | 4336 |
| 45° | 4385 | 4259 | 3400 |
| 50° | 3878 | 3446 | 2866 |
| 55° | 3432 | 2833 | 2528 |
| 60° | 2963 | 2344 | 2241 |
| 65° | 2576 | 1864 | 2061 |
| 70° | 2329 | 1600 | 2061 |
| 75° | 2236 | 1672 | 2303 |
| 80° | 2492 | 2129 | 2690 |
| 85° | 2631 | 2269 | 3223 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 198.7  | 4.3       |
| 10°-20°   | 569.4  | 12.4      |
| 20°-30°   | 852.1  | 18.6      |
| 30°-40°   | 964.6  | 21.0      |
| 40°-50°   | 821.6  | 17.9      |
| 50°-60°   | 556.3  | 12.1      |
| 60°-70°   | 332.1  | 7.2       |
| 70°-80°   | 207.5  | 4.5       |
| 80°-90°   | 87.7   | 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°    | 1620.2 | 35.3      |
| 0°-40°    | 2584.7 | 56.3      |
| 0°-60°    | 3962.7 | 86.3      |
| 0°-90°    | 4590.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4590.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2095 | 2095  | 2095 | 2095  | 2095 |      |
| 5°  | 2097 | 2091  | 2081 | 2094  | 2090 | 199  |
| 15° | 2025 | 2018  | 2013 | 2025  | 2016 | 571  |
| 25° | 1862 | 1857  | 1845 | 1854  | 1851 | 857  |
| 35° | 1577 | 1568  | 1550 | 1534  | 1517 | 983  |
| 45° | 1152 | 1155  | 1119 | 954   | 893  | 889  |
| 55° | 732  | 691   | 604  | 539   | 539  | 654  |
| 65° | 405  | 338   | 293  | 313   | 324  | 408  |
| 75° | 215  | 193   | 161  | 211   | 222  | 232  |
| 85° | 85   | 79    | 74   | 93    | 104  | 91   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2094.6 | 2094.6 | 2094.6 | 2094.6 | 2094.6 |
| 2.5°  | 2102.0 | 2096.7 | 2085.0 | 2098.8 | 2096.7 |
| 5°    | 2096.7 | 2091.4 | 2080.7 | 2093.5 | 2090.3 |
| 7.5°  | 2086.0 | 2080.7 | 2071.1 | 2083.9 | 2078.6 |
| 10°   | 2072.2 | 2065.8 | 2056.2 | 2070.1 | 2064.7 |
| 12.5° | 2050.9 | 2044.5 | 2036.0 | 2049.8 | 2042.4 |
| 15°   | 2025.3 | 2017.9 | 2012.6 | 2025.3 | 2015.8 |
| 17.5° | 1994.5 | 1988.1 | 1980.6 | 1993.4 | 1982.8 |
| 20°   | 1957.2 | 1951.9 | 1942.3 | 1949.7 | 1944.4 |
| 22.5° | 1914.6 | 1907.1 | 1897.6 | 1906.1 | 1898.6 |
| 25°   | 1862.4 | 1857.1 | 1845.4 | 1853.9 | 1850.7 |
| 27.5° | 1802.8 | 1799.6 | 1785.8 | 1796.4 | 1791.1 |
| 30°   | 1738.9 | 1730.4 | 1719.7 | 1722.9 | 1724.0 |
| 32.5° | 1665.4 | 1654.8 | 1646.3 | 1638.8 | 1631.4 |
| 35°   | 1577.0 | 1567.5 | 1550.4 | 1534.4 | 1517.4 |
| 37.5° | 1485.5 | 1472.7 | 1455.7 | 1420.5 | 1399.2 |
| 40°   | 1379.0 | 1372.6 | 1344.9 | 1295.9 | 1234.2 |
| 42.5° | 1270.4 | 1264.0 | 1239.5 | 1129.8 | 1062.7 |
| 45°   | 1152.2 | 1155.4 | 1119.2 | 954.1  | 893.4  |
| 47.5° | 1039.3 | 1047.8 | 969.0  | 814.6  | 782.7  |
| 50°   | 926.4  | 936.0  | 823.1  | 703.9  | 684.7  |
| 52.5° | 827.4  | 819.9  | 701.7  | 617.6  | 609.1  |
| 55°   | 731.6  | 691.1  | 603.8  | 538.8  | 538.8  |
| 57.5° | 633.6  | 576.1  | 513.3  | 471.7  | 471.7  |
| 60°   | 550.5  | 479.2  | 435.5  | 407.8  | 416.4  |
| 62.5° | 473.9  | 398.3  | 361.0  | 355.7  | 366.3  |
| 65°   | 404.6  | 337.6  | 292.8  | 313.1  | 323.7  |
| 67.5° | 348.2  | 288.6  | 240.7  | 283.3  | 289.6  |
| 70°   | 296.0  | 251.3  | 203.4  | 260.9  | 262.0  |
| 72.5° | 248.1  | 221.5  | 174.6  | 236.4  | 240.7  |
| 75°   | 215.1  | 192.7  | 160.8  | 210.8  | 221.5  |
| 77.5° | 188.5  | 165.1  | 148.0  | 182.1  | 202.3  |
| 80°   | 160.8  | 135.2  | 137.4  | 153.3  | 173.6  |
| 82.5° | 123.5  | 104.4  | 108.6  | 125.7  | 141.6  |
| 85°   | 85.2   | 78.8   | 73.5   | 92.6   | 104.4  |
| 87.5° | 45.8   | 42.6   | 37.3   | 52.2   | 53.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)