

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: P476338

Luminaire Tested: **14GR-LD5-50-A125-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476338
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-50-A125-UNV-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ A125 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5182.1 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.24
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

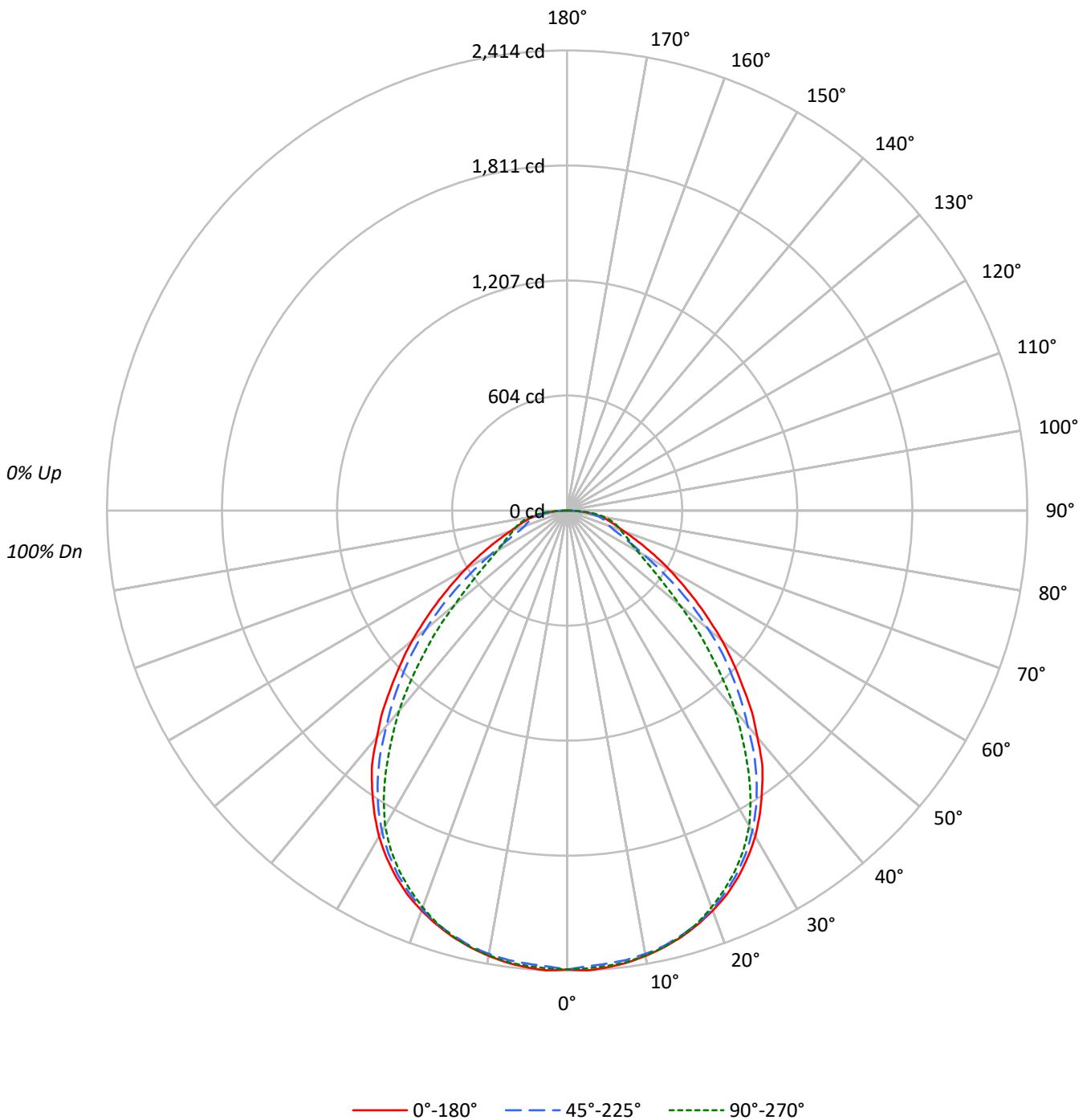
Input Watts (W): 41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 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 | | | | | 100 | | | |
| 1 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | | | | | 86 | | | | |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 86 | 82 | 88 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | | | | | 74 | | | | |
| 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 73 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | | | | | 64 | | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 67 | 61 | 72 | 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 | 48 | 59 | 52 | 47 | 58 | 51 | 47 | 56 | 51 | 46 | | | | | 44 | | | | |
| 7 | 69 | 57 | 48 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | | | | | 40 | | | | |
| 8 | 65 | 52 | 44 | 39 | 63 | 51 | 44 | 38 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | | | | | 36 | | | | |
| 9 | 61 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 44 | 39 | 34 | | | | | 33 | | | | |
| 10 | 57 | 44 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 32 | 41 | 36 | 32 | | | | | 30 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6478 | 6478 | 6478 |
| 5° | 6499 | 6444 | 6477 |
| 10° | 6483 | 6453 | 6473 |
| 15° | 6452 | 6428 | 6442 |
| 20° | 6397 | 6373 | 6342 |
| 25° | 6300 | 6250 | 6190 |
| 30° | 6133 | 6036 | 5935 |
| 35° | 5859 | 5697 | 5439 |
| 40° | 5453 | 5178 | 4822 |
| 45° | 4954 | 4656 | 4042 |
| 50° | 4436 | 4043 | 3221 |
| 55° | 3853 | 3300 | 2616 |
| 60° | 3325 | 2495 | 2281 |
| 65° | 2845 | 1994 | 2239 |
| 70° | 2511 | 1857 | 2350 |
| 75° | 2504 | 2128 | 2679 |
| 80° | 2706 | 2483 | 3079 |
| 85° | 2899 | 2640 | 3532 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 227.9 | 4.4 |
| 10°-20° | 652.2 | 12.6 |
| 20°-30° | 967.7 | 18.7 |
| 30°-40° | 1074.7 | 20.7 |
| 40°-50° | 926.9 | 17.9 |
| 50°-60° | 628.5 | 12.1 |
| 60°-70° | 363.4 | 7.0 |
| 70°-80° | 237.3 | 4.6 |
| 80°-90° | 103.5 | 2.0 |
| 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° | 1847.9 | 35.7 |
| 0°-40° | 2922.6 | 56.4 |
| 0°-60° | 4477.9 | 86.4 |
| 0°-90° | 5182.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5182.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2407 | 2407 | 2407 | 2407 | 2407 | |
| 5° | 2406 | 2396 | 2386 | 2402 | 2398 | 229 |
| 15° | 2316 | 2311 | 2307 | 2323 | 2312 | 653 |
| 25° | 2122 | 2120 | 2105 | 2099 | 2085 | 976 |
| 35° | 1784 | 1767 | 1734 | 1686 | 1656 | 1112 |
| 45° | 1302 | 1281 | 1224 | 1122 | 1062 | 1006 |
| 55° | 821 | 804 | 703 | 598 | 558 | 738 |
| 65° | 447 | 396 | 313 | 320 | 352 | 449 |
| 75° | 241 | 218 | 205 | 229 | 258 | 256 |
| 85° | 94 | 92 | 86 | 119 | 114 | 99 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P476338

CATALOG NUMBER: 14GR-LD5-50-A125-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2407.3 | 2407.3 | 2407.3 | 2407.3 | 2407.3 |
| 2.5° | 2414.5 | 2406.1 | 2392.8 | 2407.3 | 2403.7 |
| 5° | 2406.1 | 2396.5 | 2385.6 | 2402.5 | 2397.7 |
| 7.5° | 2392.8 | 2383.2 | 2377.2 | 2391.6 | 2389.2 |
| 10° | 2372.4 | 2365.1 | 2361.5 | 2379.6 | 2368.8 |
| 12.5° | 2347.1 | 2341.1 | 2339.9 | 2354.3 | 2345.9 |
| 15° | 2315.8 | 2311.0 | 2307.3 | 2323.0 | 2312.2 |
| 17.5° | 2277.2 | 2274.8 | 2272.4 | 2279.6 | 2270.0 |
| 20° | 2233.9 | 2231.5 | 2225.5 | 2226.7 | 2214.6 |
| 22.5° | 2183.3 | 2180.9 | 2168.9 | 2166.4 | 2153.2 |
| 25° | 2121.9 | 2119.5 | 2105.0 | 2099.0 | 2084.6 |
| 27.5° | 2052.0 | 2053.2 | 2029.2 | 2018.3 | 2005.1 |
| 30° | 1973.8 | 1968.9 | 1942.5 | 1924.4 | 1909.9 |
| 32.5° | 1882.2 | 1876.2 | 1844.9 | 1816.0 | 1790.7 |
| 35° | 1783.5 | 1766.6 | 1734.1 | 1685.9 | 1655.8 |
| 37.5° | 1682.3 | 1659.5 | 1611.3 | 1549.9 | 1510.1 |
| 40° | 1552.3 | 1528.2 | 1474.0 | 1404.2 | 1372.8 |
| 42.5° | 1435.5 | 1410.2 | 1350.0 | 1268.1 | 1218.7 |
| 45° | 1301.8 | 1281.3 | 1223.5 | 1122.4 | 1062.1 |
| 47.5° | 1180.2 | 1158.5 | 1099.5 | 980.3 | 921.2 |
| 50° | 1059.7 | 1035.7 | 965.8 | 837.0 | 769.5 |
| 52.5° | 934.5 | 921.2 | 835.7 | 706.9 | 652.7 |
| 55° | 821.3 | 804.4 | 703.3 | 598.5 | 557.6 |
| 57.5° | 712.9 | 685.2 | 575.6 | 497.4 | 481.7 |
| 60° | 617.8 | 579.2 | 463.6 | 420.3 | 423.9 |
| 62.5° | 527.5 | 481.7 | 380.5 | 360.1 | 380.5 |
| 65° | 446.8 | 396.2 | 313.1 | 320.3 | 351.6 |
| 67.5° | 375.7 | 327.6 | 266.1 | 295.0 | 321.5 |
| 70° | 319.1 | 279.4 | 236.0 | 268.5 | 298.7 |
| 72.5° | 273.4 | 246.9 | 221.6 | 246.9 | 279.4 |
| 75° | 240.8 | 218.0 | 204.7 | 228.8 | 257.7 |
| 77.5° | 210.7 | 192.7 | 186.7 | 205.9 | 230.0 |
| 80° | 174.6 | 166.2 | 160.2 | 185.5 | 198.7 |
| 82.5° | 134.9 | 131.3 | 126.4 | 157.8 | 163.8 |
| 85° | 93.9 | 91.5 | 85.5 | 119.2 | 114.4 |
| 87.5° | 49.4 | 47.0 | 43.4 | 62.6 | 56.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)