

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: P292468

Luminaire Tested: **22GR-LD5-24-A125-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292468
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33297)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-A125-UNV-L92765-W2A1-U-5000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A125 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2245.0 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.22 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

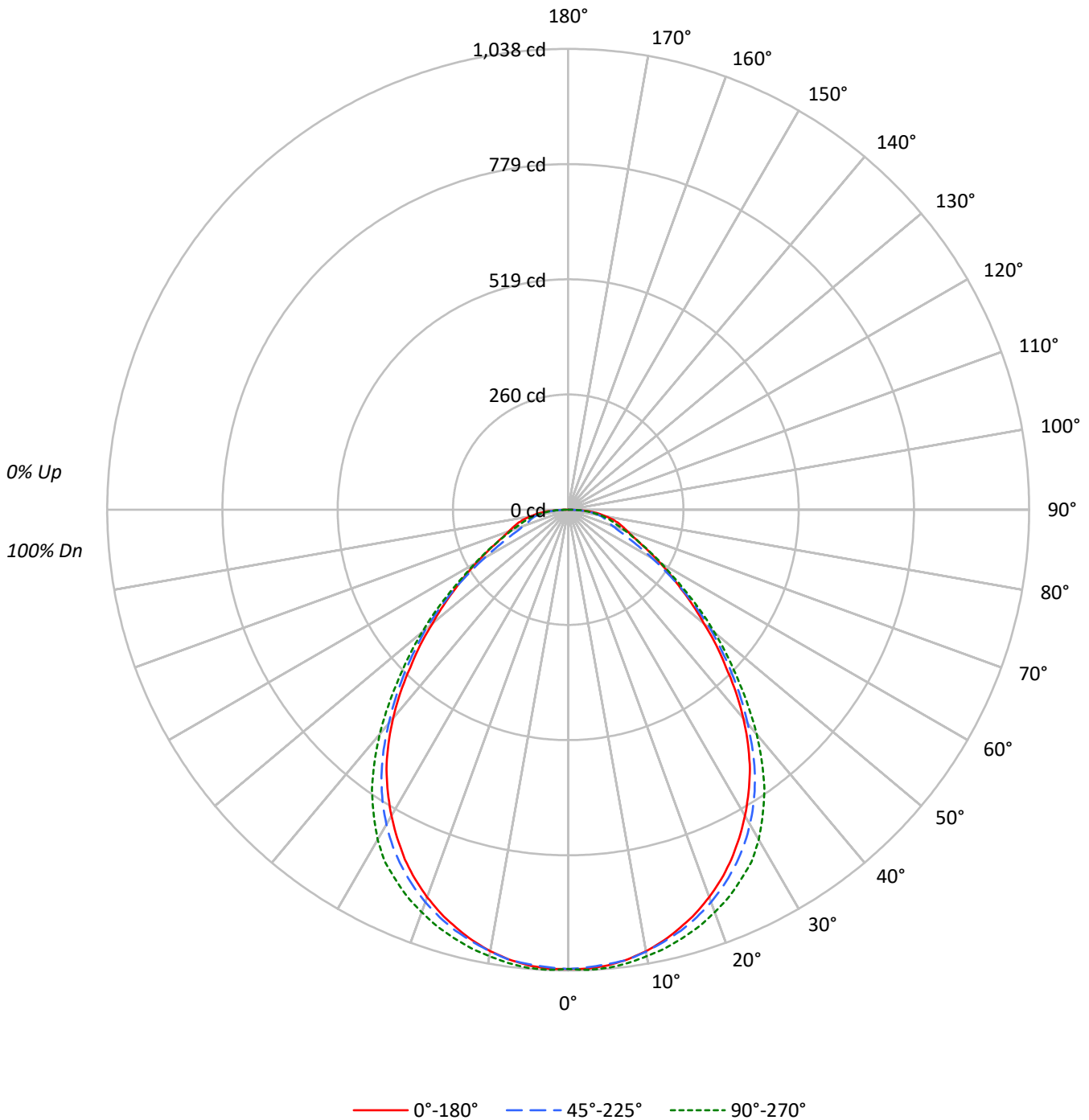
Input Watts (W): 18.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P292468

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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 | 105 | 102 | 98 | 107 | 103 | 100 | 96 | 99 | 96 | 93 | 95 | 93 | 91 | 92 | 90 | 88 | 86 | | | | | 86 | | | |
| 2 | 101 | 94 | 87 | 82 | 98 | 92 | 86 | 81 | 88 | 83 | 79 | 85 | 81 | 78 | 82 | 79 | 76 | 74 | | | | | 74 | | | |
| 3 | 93 | 83 | 76 | 70 | 91 | 82 | 75 | 69 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 | | | | | 64 | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 60 | 71 | 65 | 59 | 69 | 63 | 59 | 67 | 62 | 58 | 56 | | | | | 56 | | | |
| 5 | 80 | 68 | 59 | 53 | 78 | 67 | 59 | 53 | 65 | 58 | 52 | 63 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | 49 | | | |
| 6 | 74 | 61 | 53 | 47 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 57 | 51 | 46 | 56 | 50 | 46 | 44 | | | | | 44 | | | |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 41 | 51 | 46 | 41 | 39 | | | | | 39 | | | |
| 8 | 64 | 52 | 44 | 38 | 63 | 51 | 43 | 38 | 50 | 43 | 38 | 48 | 42 | 38 | 47 | 42 | 37 | 36 | | | | | 36 | | | |
| 9 | 60 | 48 | 40 | 35 | 59 | 47 | 40 | 34 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 | | | | | 32 | | | |
| 10 | 57 | 44 | 37 | 32 | 55 | 44 | 36 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 29 | | | | | 29 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2785 | 2785 | 2785 |
| 5° | 2783 | 2776 | 2798 |
| 10° | 2759 | 2762 | 2790 |
| 15° | 2715 | 2734 | 2781 |
| 20° | 2659 | 2694 | 2763 |
| 25° | 2581 | 2634 | 2731 |
| 30° | 2474 | 2544 | 2666 |
| 35° | 2344 | 2409 | 2531 |
| 40° | 2155 | 2208 | 2319 |
| 45° | 1914 | 1984 | 2056 |
| 50° | 1672 | 1749 | 1801 |
| 55° | 1454 | 1474 | 1528 |
| 60° | 1279 | 1172 | 1305 |
| 65° | 1137 | 937 | 1143 |
| 70° | 1116 | 832 | 1054 |
| 75° | 1219 | 914 | 1077 |
| 80° | 1339 | 1086 | 1151 |
| 85° | 1599 | 1260 | 1294 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 97.8 | 4.4 |
| 10°-20° | 277.4 | 12.4 |
| 20°-30° | 409.4 | 18.2 |
| 30°-40° | 458.2 | 20.4 |
| 40°-50° | 402.3 | 17.9 |
| 50°-60° | 284.7 | 12.7 |
| 60°-70° | 165.7 | 7.4 |
| 70°-80° | 103.3 | 4.6 |
| 80°-90° | 46.2 | 2.1 |
| 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° | 784.6 | 34.9 |
| 0°-40° | 1242.8 | 55.4 |
| 0°-60° | 1929.8 | 86.0 |
| 0°-90° | 2245.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2245.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1035 | 1035 | 1035 | 1035 | 1035 | |
| 5° | 1030 | 1028 | 1028 | 1033 | 1036 | 98 |
| 15° | 975 | 977 | 981 | 992 | 998 | 275 |
| 25° | 869 | 873 | 887 | 908 | 920 | 399 |
| 35° | 713 | 717 | 733 | 755 | 770 | 444 |
| 45° | 503 | 509 | 521 | 534 | 540 | 389 |
| 55° | 310 | 316 | 314 | 320 | 326 | 280 |
| 65° | 178 | 164 | 147 | 160 | 180 | 181 |
| 75° | 117 | 101 | 88 | 90 | 104 | 122 |
| 85° | 52 | 54 | 41 | 40 | 42 | 53 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1034.8 | 1034.8 | 1034.8 | 1034.8 | 1034.8 |
| 2.5° | 1034.8 | 1032.7 | 1031.7 | 1035.4 | 1037.5 |
| 5° | 1030.1 | 1027.5 | 1027.5 | 1032.7 | 1035.9 |
| 7.5° | 1021.7 | 1019.1 | 1022.3 | 1027.0 | 1030.1 |
| 10° | 1009.7 | 1008.7 | 1010.8 | 1017.0 | 1021.2 |
| 12.5° | 994.0 | 994.5 | 996.6 | 1006.6 | 1011.8 |
| 15° | 974.6 | 976.7 | 981.4 | 991.9 | 998.2 |
| 17.5° | 953.7 | 955.3 | 962.6 | 974.6 | 983.5 |
| 20° | 928.6 | 931.7 | 940.6 | 955.8 | 964.7 |
| 22.5° | 900.8 | 904.5 | 915.5 | 933.8 | 944.8 |
| 25° | 869.4 | 873.1 | 887.2 | 908.2 | 919.7 |
| 27.5° | 833.8 | 839.6 | 855.3 | 878.3 | 894.0 |
| 30° | 796.1 | 800.9 | 818.7 | 844.8 | 857.9 |
| 32.5° | 755.8 | 761.6 | 778.3 | 803.5 | 815.0 |
| 35° | 713.4 | 716.6 | 733.3 | 755.3 | 770.5 |
| 37.5° | 665.3 | 666.9 | 682.6 | 703.0 | 716.6 |
| 40° | 613.5 | 614.5 | 628.6 | 648.0 | 660.1 |
| 42.5° | 559.6 | 560.1 | 575.3 | 589.9 | 600.4 |
| 45° | 503.0 | 508.8 | 521.3 | 533.9 | 540.2 |
| 47.5° | 452.2 | 456.4 | 468.0 | 478.9 | 484.7 |
| 50° | 399.4 | 409.9 | 417.7 | 423.5 | 430.3 |
| 52.5° | 353.8 | 362.7 | 364.8 | 371.6 | 377.4 |
| 55° | 309.9 | 316.2 | 314.1 | 319.8 | 325.6 |
| 57.5° | 272.7 | 269.6 | 262.8 | 272.7 | 280.0 |
| 60° | 237.6 | 229.3 | 217.7 | 231.4 | 242.4 |
| 62.5° | 206.2 | 192.6 | 178.5 | 192.1 | 210.4 |
| 65° | 178.5 | 164.4 | 147.1 | 160.2 | 179.5 |
| 67.5° | 157.6 | 142.9 | 122.5 | 135.6 | 154.9 |
| 70° | 141.9 | 126.7 | 105.7 | 116.7 | 134.0 |
| 72.5° | 129.3 | 113.1 | 94.7 | 102.1 | 116.7 |
| 75° | 117.2 | 101.0 | 87.9 | 90.0 | 103.6 |
| 77.5° | 103.1 | 91.1 | 80.6 | 79.6 | 90.0 |
| 80° | 86.4 | 82.7 | 70.1 | 68.6 | 74.3 |
| 82.5° | 71.2 | 69.6 | 57.6 | 56.0 | 58.1 |
| 85° | 51.8 | 53.9 | 40.8 | 39.8 | 41.9 |
| 87.5° | 27.2 | 29.8 | 21.5 | 22.5 | 23.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)