

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: P292266

Luminaire Tested: **22GR-LD5-20-A-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292266
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-A-UNV-L92765-W2A1-U-6500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1967.0 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

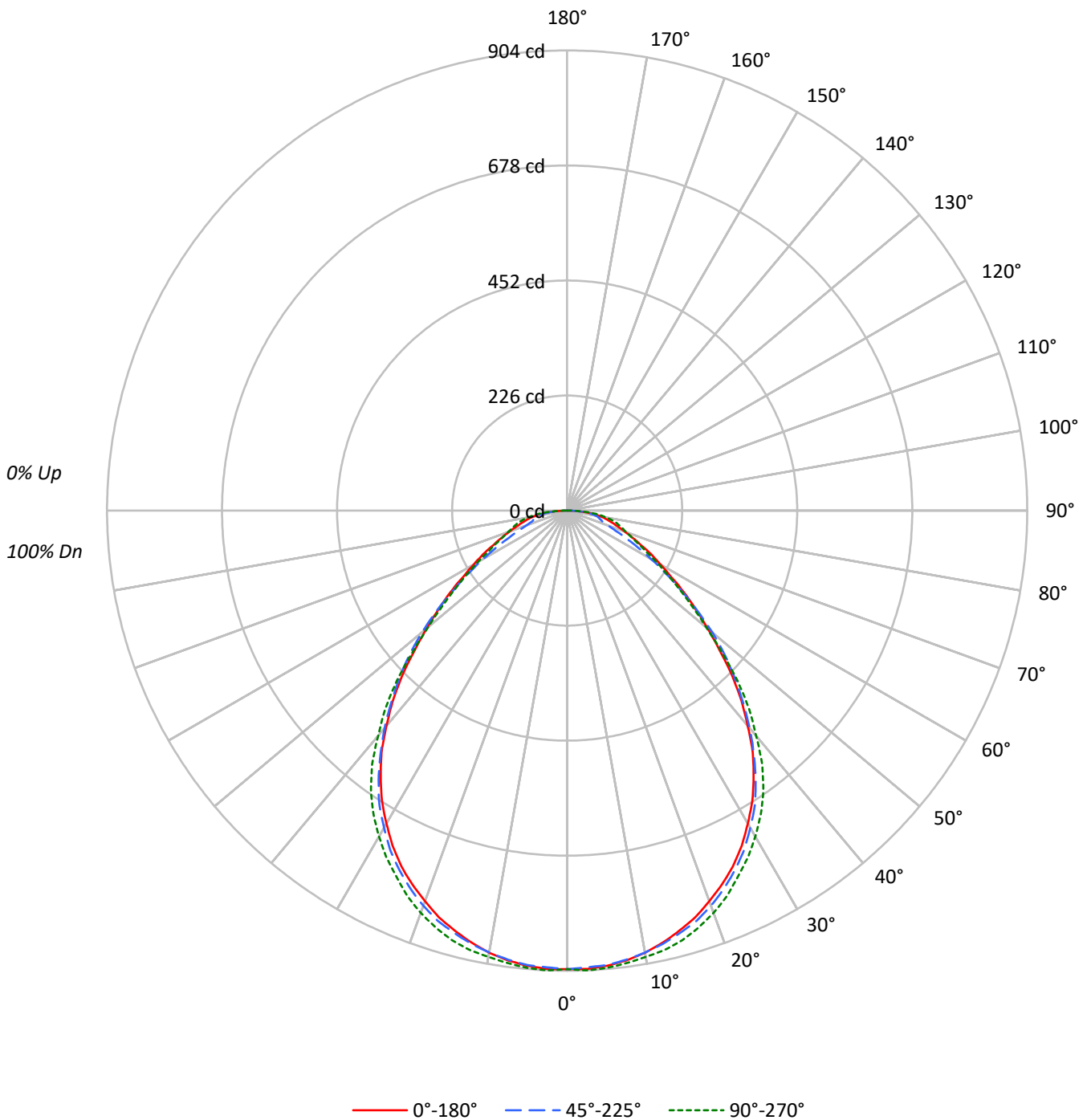
Input Watts (W): 16.182
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P292266

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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 | | | | | 86 | | | |
| 2 | 101 | 94 | 87 | 82 | 99 | 92 | 86 | 81 | 88 | 84 | 79 | 85 | 81 | 78 | 82 | 79 | 76 | 74 | | | | | 74 | | | |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 | | | | | 64 | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 60 | 71 | 65 | 60 | 69 | 63 | 59 | 67 | 62 | 58 | 56 | | | | | 56 | | | |
| 5 | 80 | 68 | 59 | 53 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | 49 | | | |
| 6 | 74 | 62 | 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 | 53 | 46 | 42 | 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 | 35 | 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 | 30 | | | | | 30 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2424 | 2424 | 2424 |
| 5° | 2425 | 2421 | 2436 |
| 10° | 2410 | 2409 | 2433 |
| 15° | 2379 | 2392 | 2434 |
| 20° | 2338 | 2366 | 2408 |
| 25° | 2289 | 2314 | 2357 |
| 30° | 2206 | 2236 | 2297 |
| 35° | 2098 | 2122 | 2207 |
| 40° | 1939 | 1960 | 2029 |
| 45° | 1742 | 1773 | 1801 |
| 50° | 1506 | 1560 | 1491 |
| 55° | 1314 | 1280 | 1263 |
| 60° | 1138 | 1025 | 1094 |
| 65° | 1017 | 804 | 982 |
| 70° | 943 | 666 | 969 |
| 75° | 942 | 704 | 1075 |
| 80° | 1043 | 886 | 1213 |
| 85° | 1087 | 960 | 1371 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 85.2 | 4.3 |
| 10°-20° | 242.8 | 12.3 |
| 20°-30° | 359.1 | 18.3 |
| 30°-40° | 405.2 | 20.6 |
| 40°-50° | 357.2 | 18.2 |
| 50°-60° | 245.0 | 12.5 |
| 60°-70° | 144.6 | 7.4 |
| 70°-80° | 90.2 | 4.6 |
| 80°-90° | 37.6 | 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° | 687.1 | 34.9 |
| 0°-40° | 1092.3 | 55.5 |
| 0°-60° | 1694.5 | 86.1 |
| 0°-90° | 1967.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1967.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 901 | 901 | 901 | 901 | 901 | |
| 5° | 898 | 896 | 896 | 899 | 902 | 85 |
| 15° | 854 | 855 | 859 | 869 | 874 | 241 |
| 25° | 771 | 774 | 780 | 790 | 794 | 354 |
| 35° | 638 | 644 | 646 | 661 | 672 | 398 |
| 45° | 458 | 460 | 466 | 469 | 473 | 352 |
| 55° | 280 | 273 | 273 | 264 | 269 | 251 |
| 65° | 160 | 140 | 126 | 146 | 154 | 161 |
| 75° | 91 | 82 | 68 | 95 | 103 | 97 |
| 85° | 35 | 33 | 31 | 41 | 44 | 38 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P292266

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 900.8 | 900.8 | 900.8 | 900.8 | 900.8 |
| 2.5° | 901.3 | 899.0 | 898.1 | 901.7 | 904.0 |
| 5° | 897.6 | 895.8 | 896.2 | 899.4 | 901.7 |
| 7.5° | 891.2 | 889.8 | 889.8 | 894.4 | 896.7 |
| 10° | 882.0 | 881.6 | 881.6 | 887.1 | 890.3 |
| 12.5° | 869.2 | 869.7 | 871.5 | 878.8 | 884.3 |
| 15° | 854.1 | 855.0 | 858.7 | 869.2 | 873.8 |
| 17.5° | 837.6 | 837.6 | 845.0 | 853.2 | 858.7 |
| 20° | 816.6 | 818.0 | 826.2 | 835.4 | 840.9 |
| 22.5° | 795.1 | 797.4 | 804.2 | 814.8 | 819.8 |
| 25° | 770.8 | 773.6 | 779.5 | 789.6 | 793.7 |
| 27.5° | 742.4 | 746.1 | 752.5 | 759.8 | 768.5 |
| 30° | 709.9 | 715.4 | 719.6 | 729.6 | 739.2 |
| 32.5° | 677.0 | 682.0 | 686.6 | 697.1 | 708.1 |
| 35° | 638.5 | 644.0 | 645.9 | 661.4 | 671.9 |
| 37.5° | 599.2 | 601.5 | 602.4 | 617.9 | 629.4 |
| 40° | 552.0 | 556.6 | 558.0 | 570.3 | 577.7 |
| 42.5° | 506.7 | 508.5 | 511.3 | 520.4 | 529.1 |
| 45° | 457.7 | 460.0 | 466.0 | 468.7 | 473.3 |
| 47.5° | 406.5 | 413.3 | 420.2 | 411.5 | 412.0 |
| 50° | 359.8 | 365.3 | 372.6 | 356.1 | 356.1 |
| 52.5° | 318.1 | 320.9 | 321.3 | 307.6 | 310.3 |
| 55° | 280.1 | 273.3 | 272.8 | 263.7 | 269.1 |
| 57.5° | 242.1 | 233.0 | 229.8 | 227.0 | 233.4 |
| 60° | 211.5 | 195.0 | 190.4 | 194.5 | 203.2 |
| 62.5° | 186.3 | 165.2 | 156.5 | 167.1 | 174.9 |
| 65° | 159.7 | 140.5 | 126.3 | 146.0 | 154.3 |
| 67.5° | 139.2 | 120.8 | 102.5 | 130.5 | 136.4 |
| 70° | 119.9 | 105.7 | 84.7 | 118.6 | 123.1 |
| 72.5° | 104.4 | 93.4 | 73.2 | 107.1 | 112.6 |
| 75° | 90.6 | 81.5 | 67.7 | 94.8 | 103.4 |
| 77.5° | 79.6 | 69.6 | 63.2 | 81.9 | 92.5 |
| 80° | 67.3 | 57.2 | 57.2 | 68.7 | 78.3 |
| 82.5° | 53.1 | 44.9 | 46.2 | 55.8 | 62.7 |
| 85° | 35.2 | 33.0 | 31.1 | 40.7 | 44.4 |
| 87.5° | 17.9 | 18.3 | 16.5 | 21.1 | 21.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)