

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: P475941

Luminaire Tested: **22GR-LD5-20-F125-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475941
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-F125-UNV-L835-CD1-U
Description: GR 2'X2' LED TROFFER w/ F125 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2045.0 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

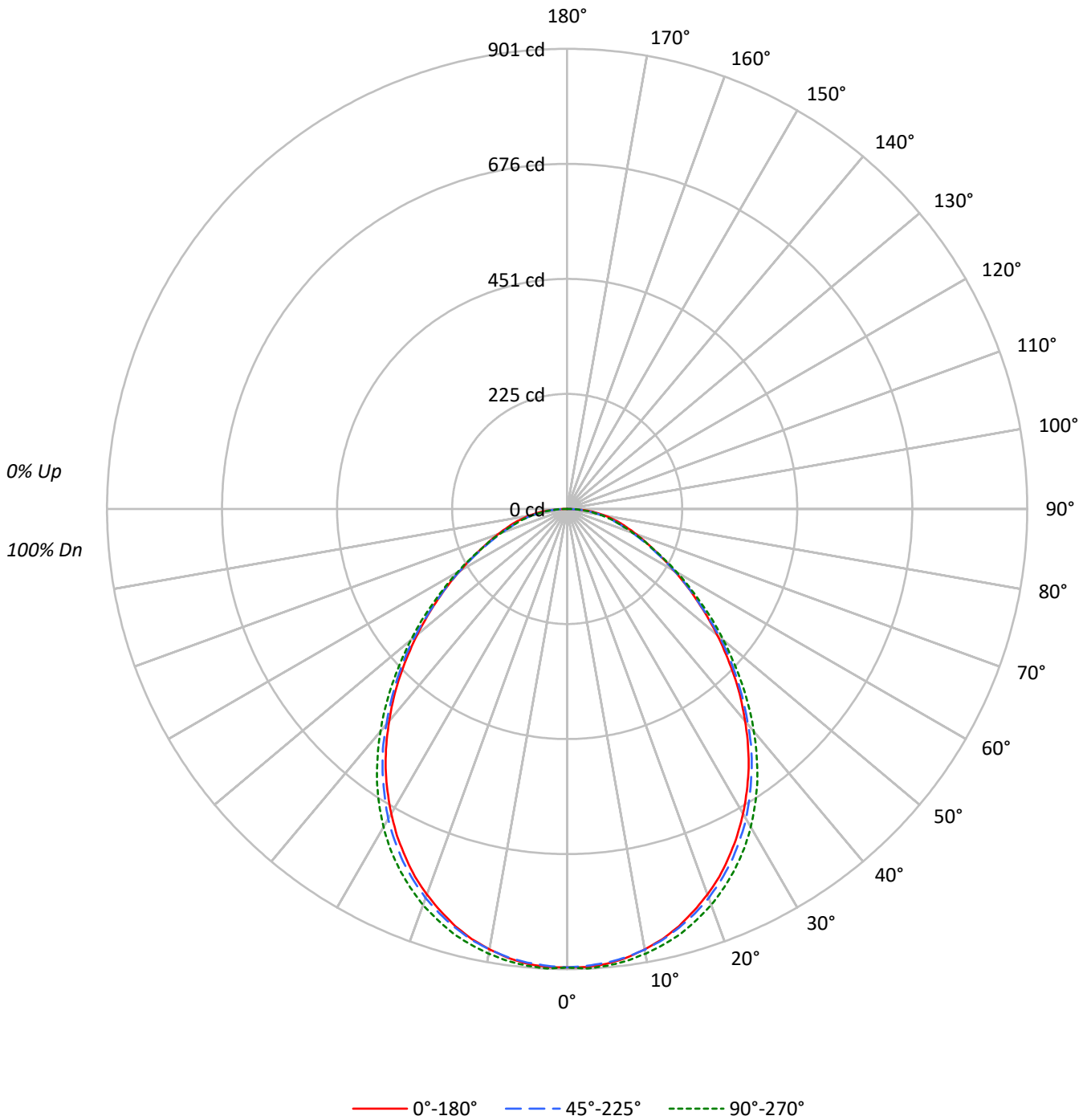
Input Watts (W): 15.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 85 |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 73 |
| 3 | 92 | 82 | 75 | 69 | 90 | 81 | 74 | 68 | 78 | 72 | 67 | 75 | 70 | 66 | 73 | 68 | 65 | 62 |
| 4 | 85 | 74 | 65 | 59 | 83 | 72 | 65 | 59 | 70 | 63 | 58 | 68 | 62 | 57 | 65 | 60 | 56 | 54 |
| 5 | 78 | 66 | 58 | 52 | 76 | 65 | 57 | 51 | 63 | 56 | 51 | 61 | 55 | 50 | 59 | 54 | 50 | 48 |
| 6 | 73 | 60 | 52 | 45 | 71 | 59 | 51 | 45 | 57 | 50 | 45 | 56 | 49 | 45 | 54 | 49 | 44 | 42 |
| 7 | 68 | 55 | 46 | 41 | 66 | 54 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 40 | 50 | 44 | 40 | 38 |
| 8 | 63 | 50 | 42 | 36 | 62 | 50 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 34 |
| 9 | 59 | 46 | 38 | 33 | 58 | 46 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 33 | 31 |
| 10 | 56 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 40 | 34 | 30 | 28 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2416 | 2416 | 2416 |
| 5° | 2415 | 2408 | 2425 |
| 10° | 2392 | 2394 | 2416 |
| 15° | 2356 | 2364 | 2398 |
| 20° | 2300 | 2321 | 2363 |
| 25° | 2229 | 2260 | 2309 |
| 30° | 2141 | 2178 | 2235 |
| 35° | 2036 | 2069 | 2133 |
| 40° | 1904 | 1935 | 1998 |
| 45° | 1762 | 1790 | 1842 |
| 50° | 1605 | 1631 | 1673 |
| 55° | 1449 | 1453 | 1496 |
| 60° | 1300 | 1305 | 1336 |
| 65° | 1184 | 1160 | 1187 |
| 70° | 1127 | 1064 | 1083 |
| 75° | 1134 | 1026 | 1031 |
| 80° | 1176 | 1037 | 1029 |
| 85° | 1291 | 1096 | 1037 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 84.8 | 4.1 |
| 10°-20° | 239.6 | 11.7 |
| 20°-30° | 350.7 | 17.1 |
| 30°-40° | 394.3 | 19.3 |
| 40°-50° | 363.6 | 17.8 |
| 50°-60° | 280.2 | 13.7 |
| 60°-70° | 184.9 | 9.0 |
| 70°-80° | 107.6 | 5.3 |
| 80°-90° | 39.2 | 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° | 675.1 | 33.0 |
| 0°-40° | 1069.4 | 52.3 |
| 0°-60° | 1713.2 | 83.8 |
| 0°-90° | 2045.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2045.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 898 | 898 | 898 | 898 | 898 | |
| 5° | 894 | 892 | 892 | 896 | 898 | 85 |
| 15° | 846 | 846 | 848 | 856 | 861 | 238 |
| 25° | 751 | 754 | 761 | 772 | 778 | 345 |
| 35° | 620 | 622 | 630 | 642 | 649 | 386 |
| 45° | 463 | 464 | 470 | 480 | 484 | 357 |
| 55° | 309 | 308 | 310 | 315 | 319 | 277 |
| 65° | 186 | 185 | 182 | 184 | 186 | 187 |
| 75° | 109 | 104 | 99 | 97 | 99 | 115 |
| 85° | 42 | 41 | 36 | 33 | 34 | 44 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P475941

CATALOG NUMBER: 22GR-LD5-20-F125-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 897.7 | 897.7 | 897.7 | 897.7 | 897.7 |
| 2.5° | 897.7 | 895.8 | 895.3 | 898.7 | 900.6 |
| 5° | 893.9 | 892.1 | 891.6 | 895.8 | 897.7 |
| 7.5° | 886.4 | 884.9 | 885.4 | 890.2 | 892.6 |
| 10° | 875.5 | 875.0 | 876.0 | 881.1 | 884.0 |
| 12.5° | 862.7 | 862.2 | 864.1 | 869.7 | 873.6 |
| 15° | 845.6 | 845.6 | 848.4 | 856.0 | 860.8 |
| 17.5° | 825.2 | 826.5 | 830.8 | 838.5 | 843.6 |
| 20° | 803.3 | 804.8 | 810.5 | 819.0 | 825.2 |
| 22.5° | 779.1 | 781.1 | 786.7 | 797.2 | 802.4 |
| 25° | 750.7 | 754.5 | 761.1 | 771.6 | 777.7 |
| 27.5° | 721.2 | 725.5 | 731.6 | 744.6 | 750.2 |
| 30° | 688.9 | 691.8 | 700.9 | 712.7 | 719.3 |
| 32.5° | 654.8 | 657.7 | 665.2 | 679.5 | 685.2 |
| 35° | 619.7 | 622.5 | 629.7 | 642.5 | 649.2 |
| 37.5° | 581.7 | 584.1 | 592.7 | 602.6 | 609.7 |
| 40° | 541.9 | 545.2 | 550.9 | 562.8 | 568.9 |
| 42.5° | 503.0 | 504.4 | 510.6 | 522.5 | 527.1 |
| 45° | 463.1 | 463.6 | 470.3 | 479.7 | 483.9 |
| 47.5° | 421.8 | 422.8 | 430.8 | 436.5 | 440.8 |
| 50° | 383.4 | 383.9 | 389.5 | 394.8 | 399.6 |
| 52.5° | 345.0 | 345.0 | 347.9 | 353.5 | 359.7 |
| 55° | 308.9 | 308.4 | 309.8 | 315.1 | 318.9 |
| 57.5° | 274.8 | 274.3 | 276.2 | 279.4 | 282.3 |
| 60° | 241.5 | 240.5 | 242.4 | 244.4 | 248.2 |
| 62.5° | 212.2 | 213.0 | 210.7 | 213.5 | 216.4 |
| 65° | 186.0 | 185.0 | 182.2 | 183.7 | 186.4 |
| 67.5° | 163.7 | 162.3 | 157.5 | 158.4 | 161.8 |
| 70° | 143.2 | 140.5 | 135.2 | 135.2 | 137.6 |
| 72.5° | 124.8 | 121.9 | 115.2 | 115.7 | 116.7 |
| 75° | 109.1 | 104.4 | 98.7 | 96.8 | 99.2 |
| 77.5° | 92.0 | 88.3 | 83.0 | 81.6 | 82.6 |
| 80° | 75.9 | 73.1 | 66.9 | 65.0 | 66.4 |
| 82.5° | 60.3 | 57.9 | 50.7 | 49.3 | 49.8 |
| 85° | 41.8 | 41.3 | 35.5 | 32.8 | 33.6 |
| 87.5° | 22.3 | 22.7 | 18.5 | 16.6 | 17.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)