

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: P475968

Luminaire Tested: **22GR-LD5-32-F125-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475968
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-32-F125-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ F125 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3338.4 lumens
Efficiency: N/A
Efficacy: 133.5 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

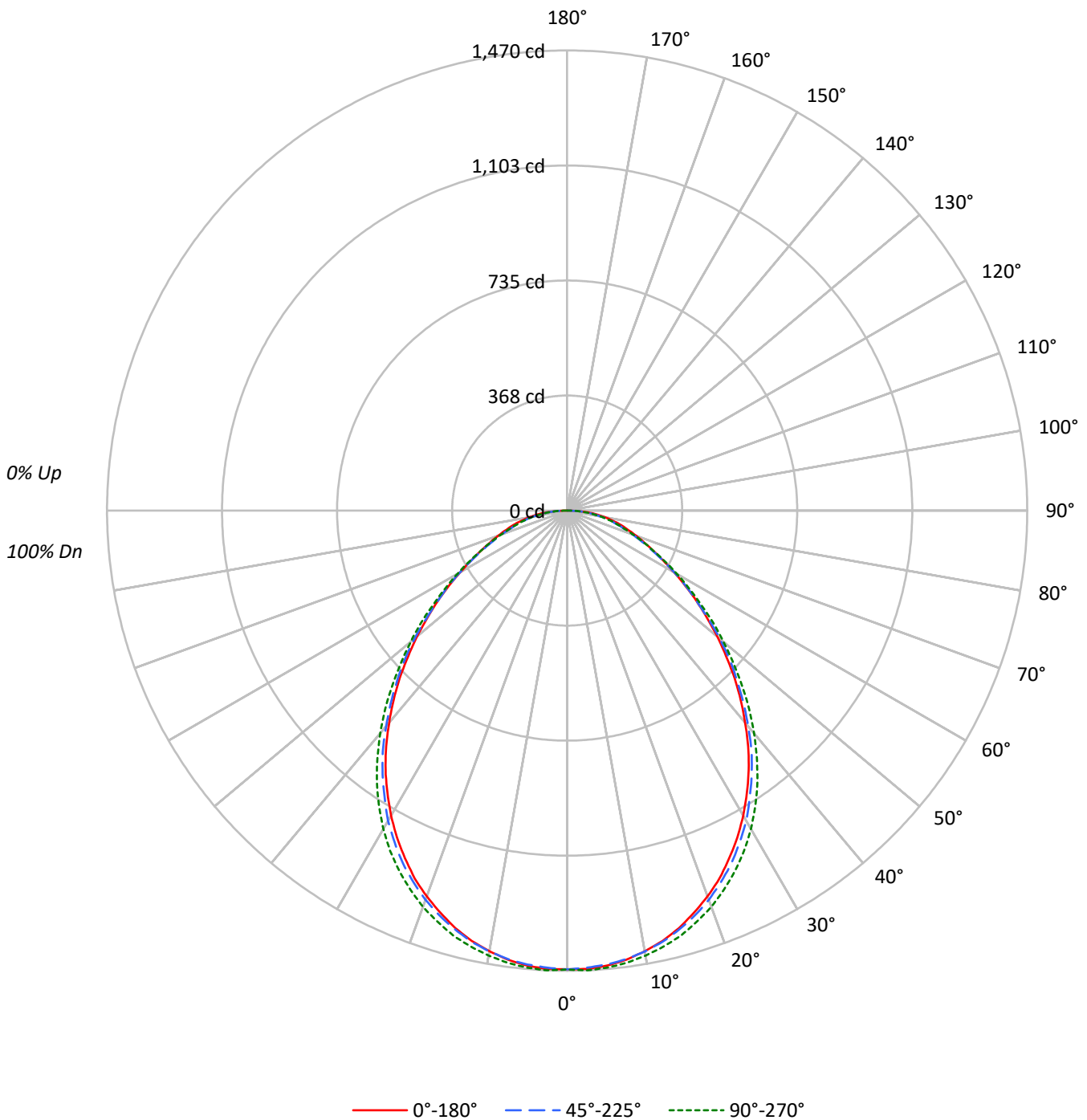
Input Watts (W): 25
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3944 | 3944 | 3944 |
| 5° | 3942 | 3932 | 3959 |
| 10° | 3905 | 3908 | 3944 |
| 15° | 3846 | 3858 | 3915 |
| 20° | 3755 | 3789 | 3858 |
| 25° | 3639 | 3689 | 3770 |
| 30° | 3495 | 3555 | 3649 |
| 35° | 3323 | 3377 | 3481 |
| 40° | 3108 | 3159 | 3263 |
| 45° | 2877 | 2922 | 3006 |
| 50° | 2620 | 2662 | 2731 |
| 55° | 2366 | 2373 | 2442 |
| 60° | 2122 | 2130 | 2181 |
| 65° | 1934 | 1894 | 1938 |
| 70° | 1840 | 1736 | 1767 |
| 75° | 1852 | 1675 | 1683 |
| 80° | 1922 | 1692 | 1680 |
| 85° | 2106 | 1791 | 1695 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 138.5 | 4.1 |
| 10°-20° | 391.1 | 11.7 |
| 20°-30° | 572.5 | 17.1 |
| 30°-40° | 643.7 | 19.3 |
| 40°-50° | 593.6 | 17.8 |
| 50°-60° | 457.5 | 13.7 |
| 60°-70° | 301.9 | 9.0 |
| 70°-80° | 175.7 | 5.3 |
| 80°-90° | 64.0 | 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° | 1102.1 | 33.0 |
| 0°-40° | 1745.8 | 52.3 |
| 0°-60° | 2796.9 | 83.8 |
| 0°-90° | 3338.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3338.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1466 | 1466 | 1466 | 1466 | 1466 | |
| 5° | 1459 | 1456 | 1456 | 1462 | 1466 | 138 |
| 15° | 1380 | 1380 | 1385 | 1398 | 1405 | 388 |
| 25° | 1226 | 1232 | 1242 | 1260 | 1270 | 564 |
| 35° | 1012 | 1016 | 1028 | 1049 | 1060 | 631 |
| 45° | 756 | 757 | 768 | 783 | 790 | 582 |
| 55° | 504 | 504 | 506 | 514 | 520 | 453 |
| 65° | 304 | 302 | 297 | 300 | 304 | 305 |
| 75° | 178 | 170 | 161 | 158 | 162 | 188 |
| 85° | 68 | 67 | 58 | 54 | 55 | 72 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P475968

CATALOG NUMBER: 22GR-LD5-32-F125-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1465.5 | 1465.5 | 1465.5 | 1465.5 | 1465.5 |
| 2.5° | 1465.5 | 1462.4 | 1461.6 | 1467.2 | 1470.2 |
| 5° | 1459.4 | 1456.3 | 1455.5 | 1462.4 | 1465.5 |
| 7.5° | 1447.1 | 1444.6 | 1445.4 | 1453.2 | 1457.1 |
| 10° | 1429.2 | 1428.4 | 1430.1 | 1438.5 | 1443.2 |
| 12.5° | 1408.3 | 1407.5 | 1410.6 | 1419.8 | 1426.2 |
| 15° | 1380.5 | 1380.5 | 1385.0 | 1397.5 | 1405.3 |
| 17.5° | 1347.1 | 1349.3 | 1356.3 | 1368.8 | 1377.2 |
| 20° | 1311.4 | 1313.9 | 1323.1 | 1337.0 | 1347.1 |
| 22.5° | 1271.9 | 1275.1 | 1284.4 | 1301.4 | 1310.0 |
| 25° | 1225.5 | 1231.7 | 1242.5 | 1259.6 | 1269.6 |
| 27.5° | 1177.4 | 1184.3 | 1194.4 | 1215.5 | 1224.7 |
| 30° | 1124.7 | 1129.4 | 1144.2 | 1163.4 | 1174.3 |
| 32.5° | 1069.0 | 1073.7 | 1086.0 | 1109.3 | 1118.6 |
| 35° | 1011.6 | 1016.3 | 1028.0 | 1048.9 | 1059.7 |
| 37.5° | 949.7 | 953.6 | 967.5 | 983.7 | 995.4 |
| 40° | 884.7 | 890.1 | 899.3 | 918.7 | 928.8 |
| 42.5° | 821.2 | 823.4 | 833.5 | 853.0 | 860.5 |
| 45° | 756.0 | 756.8 | 767.7 | 783.1 | 790.0 |
| 47.5° | 688.6 | 690.2 | 703.4 | 712.6 | 719.5 |
| 50° | 625.9 | 626.7 | 635.9 | 644.5 | 652.3 |
| 52.5° | 563.2 | 563.2 | 567.9 | 577.1 | 587.2 |
| 55° | 504.4 | 503.5 | 505.8 | 514.4 | 520.5 |
| 57.5° | 448.6 | 447.8 | 450.9 | 456.2 | 460.9 |
| 60° | 394.3 | 392.7 | 395.7 | 399.0 | 405.2 |
| 62.5° | 346.3 | 347.8 | 343.9 | 348.6 | 353.3 |
| 65° | 303.7 | 302.1 | 297.4 | 299.8 | 304.3 |
| 67.5° | 267.2 | 265.0 | 257.2 | 258.6 | 264.2 |
| 70° | 233.8 | 229.3 | 220.7 | 220.7 | 224.6 |
| 72.5° | 203.7 | 199.0 | 188.1 | 189.0 | 190.6 |
| 75° | 178.1 | 170.5 | 161.1 | 158.0 | 161.9 |
| 77.5° | 150.2 | 144.1 | 135.5 | 133.2 | 134.9 |
| 80° | 124.0 | 119.3 | 109.2 | 106.2 | 108.4 |
| 82.5° | 98.4 | 94.5 | 82.8 | 80.5 | 81.4 |
| 85° | 68.2 | 67.4 | 58.0 | 53.5 | 54.9 |
| 87.5° | 36.5 | 37.1 | 30.1 | 27.1 | 28.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)