

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: P476235

Luminaire Tested: **14GR-LD5-32-F125-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476235
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-32-F125-UNV-L850-CD1-U
Description: GR 1'X4' LED TROFFER w/ F125 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3317.2 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

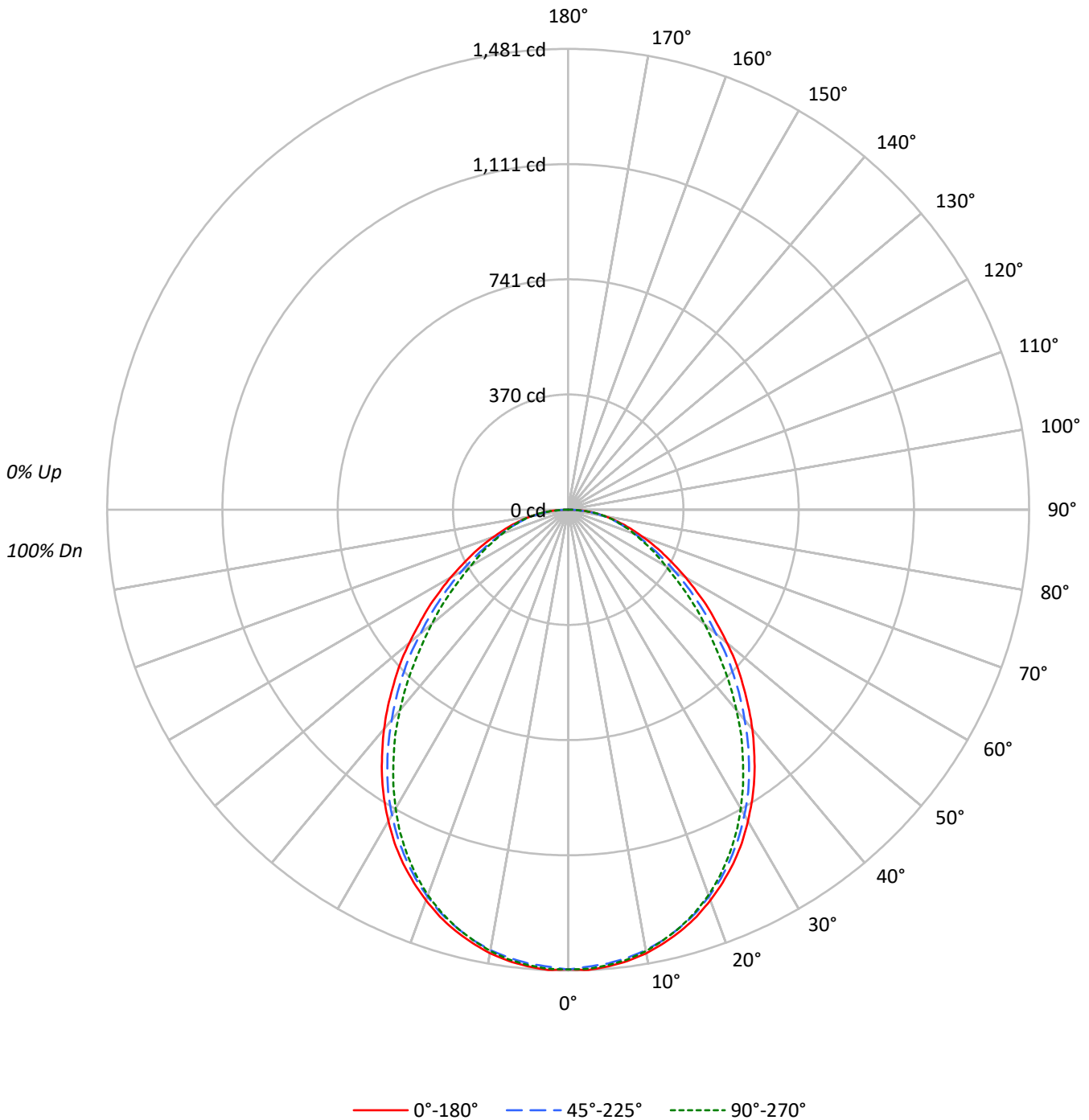
Input Watts (W): 25
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P476235

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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 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 98 | 95 | 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 | 72 | | | | | 72 | | | |
| 3 | 92 | 82 | 74 | 68 | 90 | 81 | 73 | 68 | 78 | 72 | 67 | 75 | 70 | 65 | 72 | 68 | 64 | 62 | | | | | 62 | | | |
| 4 | 85 | 73 | 65 | 59 | 83 | 72 | 64 | 58 | 70 | 63 | 58 | 67 | 62 | 57 | 65 | 60 | 56 | 54 | | | | | 54 | | | |
| 5 | 78 | 66 | 58 | 51 | 76 | 65 | 57 | 51 | 63 | 56 | 51 | 61 | 55 | 50 | 59 | 54 | 50 | 47 | | | | | 47 | | | |
| 6 | 73 | 60 | 52 | 45 | 71 | 59 | 51 | 45 | 57 | 50 | 45 | 56 | 49 | 44 | 54 | 48 | 44 | 42 | | | | | 42 | | | |
| 7 | 68 | 55 | 46 | 41 | 66 | 54 | 46 | 40 | 52 | 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° | 3976 | 3976 | 3976 |
| 5° | 3981 | 3954 | 3969 |
| 10° | 3954 | 3927 | 3936 |
| 15° | 3903 | 3871 | 3871 |
| 20° | 3825 | 3788 | 3775 |
| 25° | 3725 | 3670 | 3632 |
| 30° | 3589 | 3518 | 3445 |
| 35° | 3428 | 3328 | 3213 |
| 40° | 3234 | 3098 | 2954 |
| 45° | 3015 | 2859 | 2665 |
| 50° | 2786 | 2592 | 2399 |
| 55° | 2571 | 2350 | 2158 |
| 60° | 2344 | 2124 | 1948 |
| 65° | 2155 | 1928 | 1841 |
| 70° | 2000 | 1803 | 1767 |
| 75° | 1909 | 1752 | 1783 |
| 80° | 1870 | 1764 | 1858 |
| 85° | 1920 | 1735 | 1853 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 139.4 | 4.2 |
| 10°-20° | 392.4 | 11.8 |
| 20°-30° | 569.2 | 17.2 |
| 30°-40° | 632.0 | 19.1 |
| 40°-50° | 578.2 | 17.4 |
| 50°-60° | 450.4 | 13.6 |
| 60°-70° | 307.7 | 9.3 |
| 70°-80° | 183.8 | 5.5 |
| 80°-90° | 63.9 | 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° | 1101.0 | 33.2 |
| 0°-40° | 1733.0 | 52.2 |
| 0°-60° | 2761.7 | 83.3 |
| 0°-90° | 3317.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3317.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1478 | 1478 | 1478 | 1478 | 1478 | |
| 5° | 1474 | 1471 | 1464 | 1472 | 1469 | 140 |
| 15° | 1401 | 1397 | 1390 | 1395 | 1390 | 395 |
| 25° | 1254 | 1249 | 1236 | 1232 | 1223 | 577 |
| 35° | 1044 | 1034 | 1013 | 992 | 978 | 651 |
| 45° | 792 | 782 | 751 | 716 | 700 | 612 |
| 55° | 548 | 531 | 501 | 471 | 460 | 489 |
| 65° | 338 | 326 | 303 | 289 | 289 | 337 |
| 75° | 184 | 176 | 168 | 172 | 172 | 195 |
| 85° | 62 | 59 | 56 | 62 | 60 | 67 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P476235

CATALOG NUMBER: 14GR-LD5-32-F125-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1477.5 | 1477.5 | 1477.5 | 1477.5 | 1477.5 |
| 2.5° | 1480.6 | 1476.8 | 1469.9 | 1477.5 | 1476.8 |
| 5° | 1473.7 | 1470.7 | 1463.9 | 1471.5 | 1469.2 |
| 7.5° | 1463.1 | 1460.1 | 1452.5 | 1460.8 | 1457.8 |
| 10° | 1447.2 | 1443.4 | 1437.3 | 1443.4 | 1440.3 |
| 12.5° | 1425.9 | 1422.1 | 1416.1 | 1421.4 | 1416.1 |
| 15° | 1400.9 | 1397.1 | 1389.5 | 1394.8 | 1389.5 |
| 17.5° | 1371.3 | 1366.0 | 1359.9 | 1360.7 | 1356.1 |
| 20° | 1335.6 | 1330.3 | 1322.7 | 1322.7 | 1318.2 |
| 22.5° | 1296.9 | 1291.6 | 1282.5 | 1279.5 | 1273.4 |
| 25° | 1254.4 | 1249.1 | 1236.2 | 1232.4 | 1223.3 |
| 27.5° | 1208.1 | 1199.8 | 1186.9 | 1178.5 | 1169.4 |
| 30° | 1155.0 | 1148.2 | 1132.2 | 1120.1 | 1108.7 |
| 32.5° | 1101.1 | 1094.3 | 1076.1 | 1057.9 | 1045.7 |
| 35° | 1043.5 | 1034.3 | 1013.1 | 991.8 | 978.2 |
| 37.5° | 981.2 | 973.6 | 949.4 | 923.6 | 912.9 |
| 40° | 920.5 | 910.6 | 881.8 | 855.3 | 840.8 |
| 42.5° | 856.8 | 846.1 | 817.3 | 787.0 | 771.0 |
| 45° | 792.3 | 781.6 | 751.3 | 716.4 | 700.4 |
| 47.5° | 732.3 | 718.7 | 686.8 | 651.9 | 632.9 |
| 50° | 665.5 | 654.1 | 619.2 | 585.9 | 573.0 |
| 52.5° | 603.3 | 592.7 | 560.0 | 527.4 | 515.3 |
| 55° | 547.9 | 531.2 | 500.9 | 471.3 | 459.9 |
| 57.5° | 488.7 | 475.1 | 446.2 | 418.1 | 406.8 |
| 60° | 435.6 | 425.0 | 394.6 | 370.3 | 362.0 |
| 62.5° | 383.2 | 374.9 | 346.8 | 328.6 | 323.3 |
| 65° | 338.5 | 325.6 | 302.8 | 289.1 | 289.1 |
| 67.5° | 296.0 | 283.1 | 263.3 | 258.0 | 253.5 |
| 70° | 254.2 | 244.4 | 229.2 | 224.6 | 224.6 |
| 72.5° | 217.0 | 208.7 | 198.1 | 196.5 | 199.6 |
| 75° | 183.6 | 176.1 | 168.5 | 171.5 | 171.5 |
| 77.5° | 150.3 | 144.9 | 141.9 | 143.4 | 146.5 |
| 80° | 120.7 | 116.9 | 113.8 | 117.6 | 119.9 |
| 82.5° | 92.6 | 88.8 | 86.5 | 91.8 | 91.1 |
| 85° | 62.2 | 59.2 | 56.2 | 61.5 | 60.0 |
| 87.5° | 31.1 | 29.6 | 24.3 | 27.3 | 23.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)