

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: P476226

Luminaire Tested: **14GR-LD5-32-F125-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476226
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-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ F125 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3313.9 lumens
Efficiency: N/A
Efficacy: 132.6 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

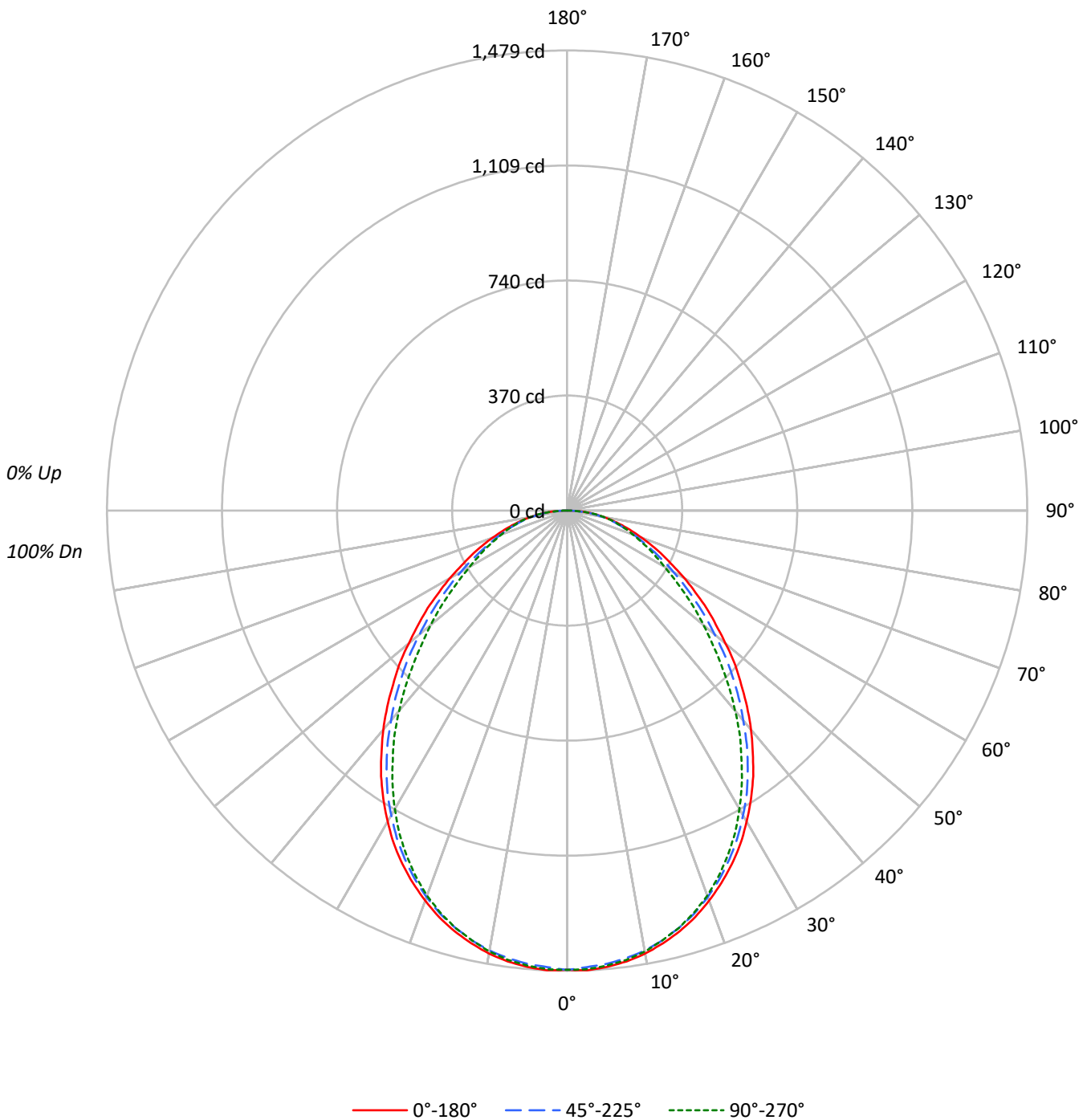
Input Watts (W): 25
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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° | 3972 | 3972 | 3972 |
| 5° | 3977 | 3950 | 3965 |
| 10° | 3951 | 3924 | 3932 |
| 15° | 3899 | 3867 | 3867 |
| 20° | 3821 | 3784 | 3771 |
| 25° | 3721 | 3667 | 3629 |
| 30° | 3585 | 3515 | 3442 |
| 35° | 3424 | 3325 | 3210 |
| 40° | 3230 | 3094 | 2951 |
| 45° | 3012 | 2856 | 2663 |
| 50° | 2784 | 2590 | 2396 |
| 55° | 2568 | 2348 | 2155 |
| 60° | 2342 | 2122 | 1946 |
| 65° | 2153 | 1926 | 1839 |
| 70° | 1998 | 1802 | 1766 |
| 75° | 1908 | 1750 | 1781 |
| 80° | 1867 | 1762 | 1857 |
| 85° | 1920 | 1732 | 1849 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 139.3 | 4.2 |
| 10°-20° | 392.0 | 11.8 |
| 20°-30° | 568.7 | 17.2 |
| 30°-40° | 631.4 | 19.1 |
| 40°-50° | 577.7 | 17.4 |
| 50°-60° | 450.0 | 13.6 |
| 60°-70° | 307.4 | 9.3 |
| 70°-80° | 183.6 | 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° | 1099.9 | 33.2 |
| 0°-40° | 1731.3 | 52.2 |
| 0°-60° | 2759.0 | 83.3 |
| 0°-90° | 3313.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3313.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1476 | 1476 | 1476 | 1476 | 1476 | |
| 5° | 1472 | 1469 | 1462 | 1470 | 1468 | 140 |
| 15° | 1400 | 1396 | 1388 | 1393 | 1388 | 394 |
| 25° | 1253 | 1248 | 1235 | 1231 | 1222 | 576 |
| 35° | 1042 | 1033 | 1012 | 991 | 977 | 650 |
| 45° | 792 | 781 | 750 | 716 | 700 | 611 |
| 55° | 547 | 531 | 500 | 471 | 459 | 489 |
| 65° | 338 | 325 | 302 | 289 | 289 | 337 |
| 75° | 184 | 176 | 168 | 171 | 171 | 195 |
| 85° | 62 | 59 | 56 | 61 | 60 | 67 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P476226

CATALOG NUMBER: 14GR-LD5-32-F125-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1476.1 | 1476.1 | 1476.1 | 1476.1 | 1476.1 |
| 2.5° | 1479.1 | 1475.3 | 1468.5 | 1476.1 | 1475.3 |
| 5° | 1472.3 | 1469.3 | 1462.4 | 1470.0 | 1467.7 |
| 7.5° | 1461.7 | 1458.6 | 1451.1 | 1459.4 | 1456.4 |
| 10° | 1445.8 | 1442.0 | 1435.9 | 1442.0 | 1438.9 |
| 12.5° | 1424.5 | 1420.7 | 1414.7 | 1420.0 | 1414.7 |
| 15° | 1399.5 | 1395.7 | 1388.1 | 1393.4 | 1388.1 |
| 17.5° | 1369.9 | 1364.6 | 1358.6 | 1359.3 | 1354.8 |
| 20° | 1334.3 | 1329.0 | 1321.4 | 1321.4 | 1316.9 |
| 22.5° | 1295.6 | 1290.3 | 1281.2 | 1278.2 | 1272.1 |
| 25° | 1253.2 | 1247.9 | 1235.0 | 1231.2 | 1222.1 |
| 27.5° | 1206.9 | 1198.6 | 1185.7 | 1177.4 | 1168.3 |
| 30° | 1153.9 | 1147.1 | 1131.1 | 1119.0 | 1107.6 |
| 32.5° | 1100.0 | 1093.2 | 1075.0 | 1056.8 | 1044.7 |
| 35° | 1042.4 | 1033.3 | 1012.1 | 990.9 | 977.2 |
| 37.5° | 980.3 | 972.7 | 948.4 | 922.6 | 912.0 |
| 40° | 919.6 | 909.8 | 880.9 | 854.4 | 840.0 |
| 42.5° | 855.9 | 845.3 | 816.5 | 786.2 | 770.3 |
| 45° | 791.5 | 780.9 | 750.5 | 715.7 | 699.8 |
| 47.5° | 731.6 | 717.9 | 686.1 | 651.2 | 632.3 |
| 50° | 664.9 | 653.5 | 618.6 | 585.3 | 572.4 |
| 52.5° | 602.7 | 592.1 | 559.5 | 526.9 | 514.8 |
| 55° | 547.4 | 530.7 | 500.4 | 470.8 | 459.4 |
| 57.5° | 488.2 | 474.6 | 445.8 | 417.7 | 406.4 |
| 60° | 435.2 | 424.6 | 394.2 | 370.0 | 361.6 |
| 62.5° | 382.9 | 374.5 | 346.5 | 328.3 | 323.0 |
| 65° | 338.1 | 325.2 | 302.5 | 288.8 | 288.8 |
| 67.5° | 295.7 | 282.8 | 263.1 | 257.8 | 253.2 |
| 70° | 254.0 | 244.1 | 229.0 | 224.4 | 224.4 |
| 72.5° | 216.8 | 208.5 | 197.9 | 196.4 | 199.4 |
| 75° | 183.5 | 175.9 | 168.3 | 171.3 | 171.3 |
| 77.5° | 150.1 | 144.8 | 141.8 | 143.3 | 146.3 |
| 80° | 120.5 | 116.8 | 113.7 | 117.5 | 119.8 |
| 82.5° | 92.5 | 88.7 | 86.4 | 91.7 | 91.0 |
| 85° | 62.2 | 59.1 | 56.1 | 61.4 | 59.9 |
| 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)