

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: P475582

Luminaire Tested: **24GR-LD5-34-F125-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475582
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-34-F125-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ F125 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3331.1 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

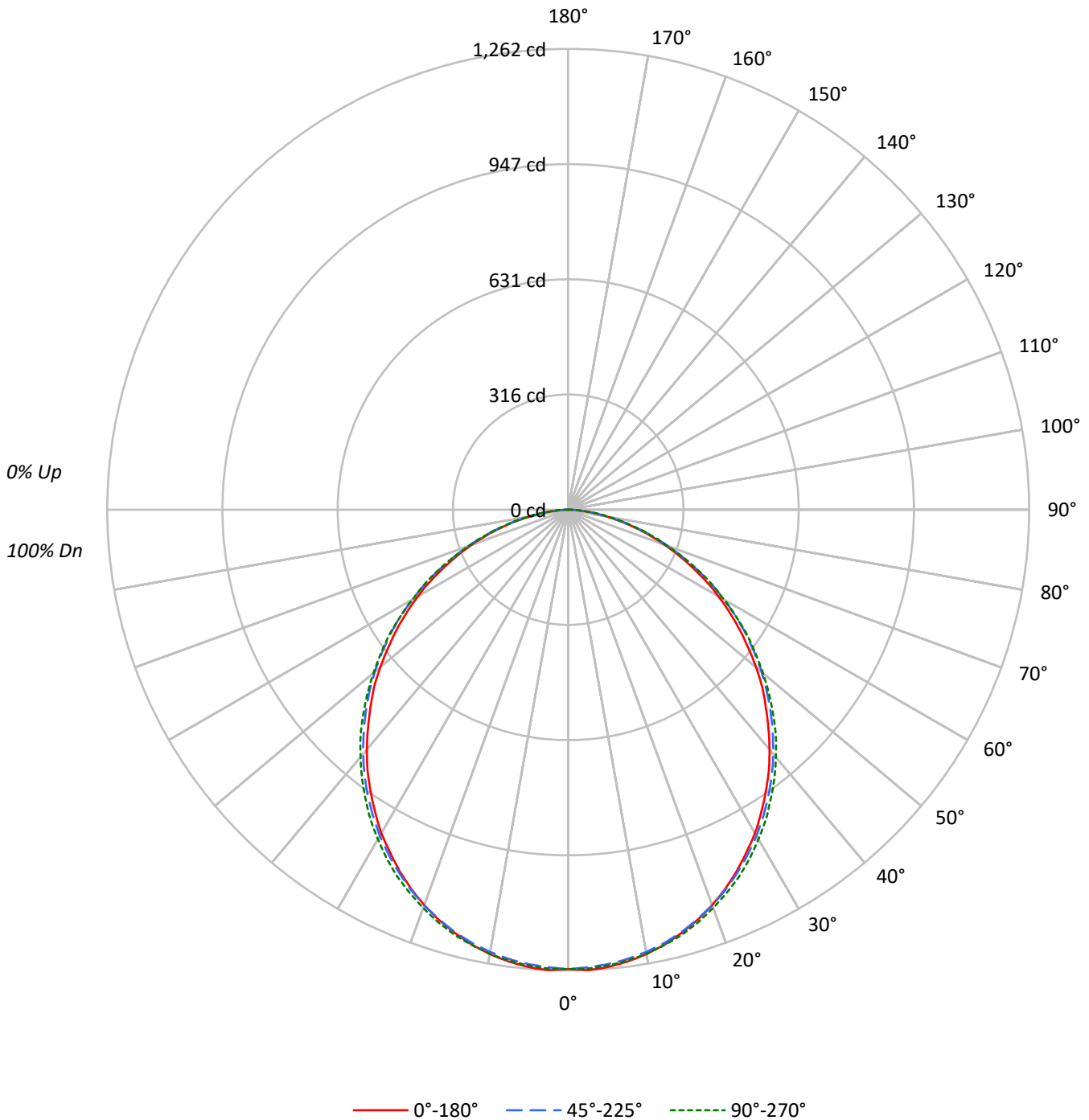
Input Watts (W): 24
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P475582

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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 | 109 | 104 | 100 | 97 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 85 | 79 | 97 | 89 | 83 | 78 | 86 | 81 | 76 | 83 | 78 | 75 | 80 | 76 | 73 | 71 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 69 | 64 | 73 | 68 | 63 | 71 | 66 | 62 | 60 |
| 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 56 | 68 | 61 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 |
| 5 | 77 | 64 | 55 | 48 | 74 | 63 | 54 | 48 | 61 | 53 | 48 | 59 | 52 | 47 | 57 | 51 | 47 | 45 |
| 6 | 71 | 58 | 49 | 42 | 69 | 57 | 48 | 42 | 55 | 47 | 42 | 53 | 47 | 41 | 52 | 46 | 41 | 39 |
| 7 | 66 | 52 | 44 | 38 | 64 | 51 | 43 | 37 | 50 | 43 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 35 |
| 8 | 61 | 48 | 39 | 34 | 60 | 47 | 39 | 33 | 46 | 38 | 33 | 45 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1693 | 1693 | 1693 |
| 5° | 1698 | 1687 | 1692 |
| 10° | 1688 | 1680 | 1687 |
| 15° | 1671 | 1668 | 1678 |
| 20° | 1650 | 1650 | 1662 |
| 25° | 1621 | 1628 | 1645 |
| 30° | 1590 | 1601 | 1618 |
| 35° | 1549 | 1570 | 1588 |
| 40° | 1506 | 1533 | 1554 |
| 45° | 1456 | 1492 | 1511 |
| 50° | 1406 | 1447 | 1456 |
| 55° | 1345 | 1393 | 1403 |
| 60° | 1281 | 1324 | 1326 |
| 65° | 1196 | 1243 | 1249 |
| 70° | 1108 | 1140 | 1136 |
| 75° | 985 | 1020 | 1023 |
| 80° | 824 | 853 | 885 |
| 85° | 618 | 665 | 689 |



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CATALOG NUMBER: 24GR-LD5-34-F125-UNV-L830-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 118.9 | 3.6 |
| 10°-20° | 338.2 | 10.2 |
| 20°-30° | 505.5 | 15.2 |
| 30°-40° | 597.2 | 17.9 |
| 40°-50° | 602.9 | 18.1 |
| 50°-60° | 526.2 | 15.8 |
| 60°-70° | 383.6 | 11.5 |
| 70°-80° | 206.9 | 6.2 |
| 80°-90° | 51.8 | 1.6 |
| 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° | 962.5 | 28.9 |
| 0°-40° | 1559.8 | 46.8 |
| 0°-60° | 2688.8 | 80.7 |
| 0°-90° | 3331.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3331.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1258 | 1258 | 1258 | 1258 | 1258 | |
| 5° | 1257 | 1252 | 1249 | 1250 | 1253 | 119 |
| 15° | 1200 | 1197 | 1197 | 1200 | 1205 | 338 |
| 25° | 1092 | 1092 | 1096 | 1103 | 1108 | 503 |
| 35° | 943 | 946 | 956 | 965 | 967 | 590 |
| 45° | 765 | 771 | 784 | 794 | 794 | 591 |
| 55° | 573 | 580 | 594 | 596 | 598 | 512 |
| 65° | 376 | 384 | 390 | 391 | 392 | 373 |
| 75° | 189 | 191 | 196 | 197 | 197 | 201 |
| 85° | 40 | 41 | 43 | 45 | 45 | 49 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P475582

CATALOG NUMBER: 24GR-LD5-34-F125-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1258.0 | 1258.0 | 1258.0 | 1258.0 | 1258.0 |
| 2.5° | 1262.2 | 1257.6 | 1254.0 | 1254.8 | 1257.8 |
| 5° | 1257.1 | 1252.5 | 1249.1 | 1250.3 | 1252.7 |
| 7.5° | 1248.0 | 1243.8 | 1241.2 | 1242.3 | 1245.5 |
| 10° | 1235.5 | 1232.1 | 1229.7 | 1231.4 | 1234.8 |
| 12.5° | 1219.7 | 1216.3 | 1215.3 | 1217.8 | 1220.8 |
| 15° | 1199.8 | 1197.4 | 1197.2 | 1200.0 | 1204.6 |
| 17.5° | 1177.6 | 1175.1 | 1176.4 | 1180.2 | 1184.2 |
| 20° | 1152.3 | 1150.0 | 1152.6 | 1157.7 | 1160.4 |
| 22.5° | 1123.4 | 1121.5 | 1126.2 | 1131.5 | 1134.9 |
| 25° | 1092.0 | 1092.2 | 1096.4 | 1103.3 | 1107.9 |
| 27.5° | 1057.3 | 1058.6 | 1064.8 | 1071.6 | 1076.2 |
| 30° | 1023.1 | 1022.0 | 1030.8 | 1038.2 | 1041.6 |
| 32.5° | 983.4 | 984.0 | 994.4 | 1001.9 | 1007.0 |
| 35° | 942.8 | 945.5 | 955.7 | 964.9 | 966.8 |
| 37.5° | 901.9 | 903.7 | 916.0 | 925.1 | 927.5 |
| 40° | 857.5 | 860.9 | 873.0 | 881.5 | 884.5 |
| 42.5° | 811.2 | 815.6 | 828.6 | 837.5 | 841.4 |
| 45° | 765.3 | 770.8 | 784.0 | 793.8 | 794.0 |
| 47.5° | 721.0 | 724.9 | 737.8 | 746.5 | 745.5 |
| 50° | 671.5 | 677.3 | 691.1 | 696.4 | 695.8 |
| 52.5° | 620.9 | 629.8 | 642.4 | 646.6 | 646.0 |
| 55° | 573.3 | 580.3 | 593.9 | 596.1 | 598.2 |
| 57.5° | 524.0 | 530.1 | 544.8 | 545.7 | 545.3 |
| 60° | 475.9 | 481.3 | 492.1 | 494.7 | 492.7 |
| 62.5° | 427.3 | 432.8 | 442.4 | 445.1 | 444.7 |
| 65° | 375.8 | 383.9 | 390.3 | 391.1 | 392.4 |
| 67.5° | 327.8 | 332.9 | 339.1 | 340.3 | 339.3 |
| 70° | 281.7 | 286.1 | 289.7 | 290.4 | 288.7 |
| 72.5° | 234.2 | 238.1 | 243.2 | 244.2 | 242.3 |
| 75° | 189.4 | 191.3 | 196.2 | 197.0 | 196.8 |
| 77.5° | 146.0 | 147.5 | 151.1 | 153.9 | 154.3 |
| 80° | 106.3 | 106.9 | 110.1 | 112.2 | 114.2 |
| 82.5° | 70.4 | 71.9 | 74.4 | 76.5 | 78.4 |
| 85° | 40.0 | 41.0 | 43.1 | 45.1 | 44.6 |
| 87.5° | 15.5 | 17.6 | 17.8 | 19.8 | 20.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)