

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: P293342

Luminaire Tested: **24GR-LD5-34-F125-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293342
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-34-F125-UNV-L92765-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F125 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2845.0 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

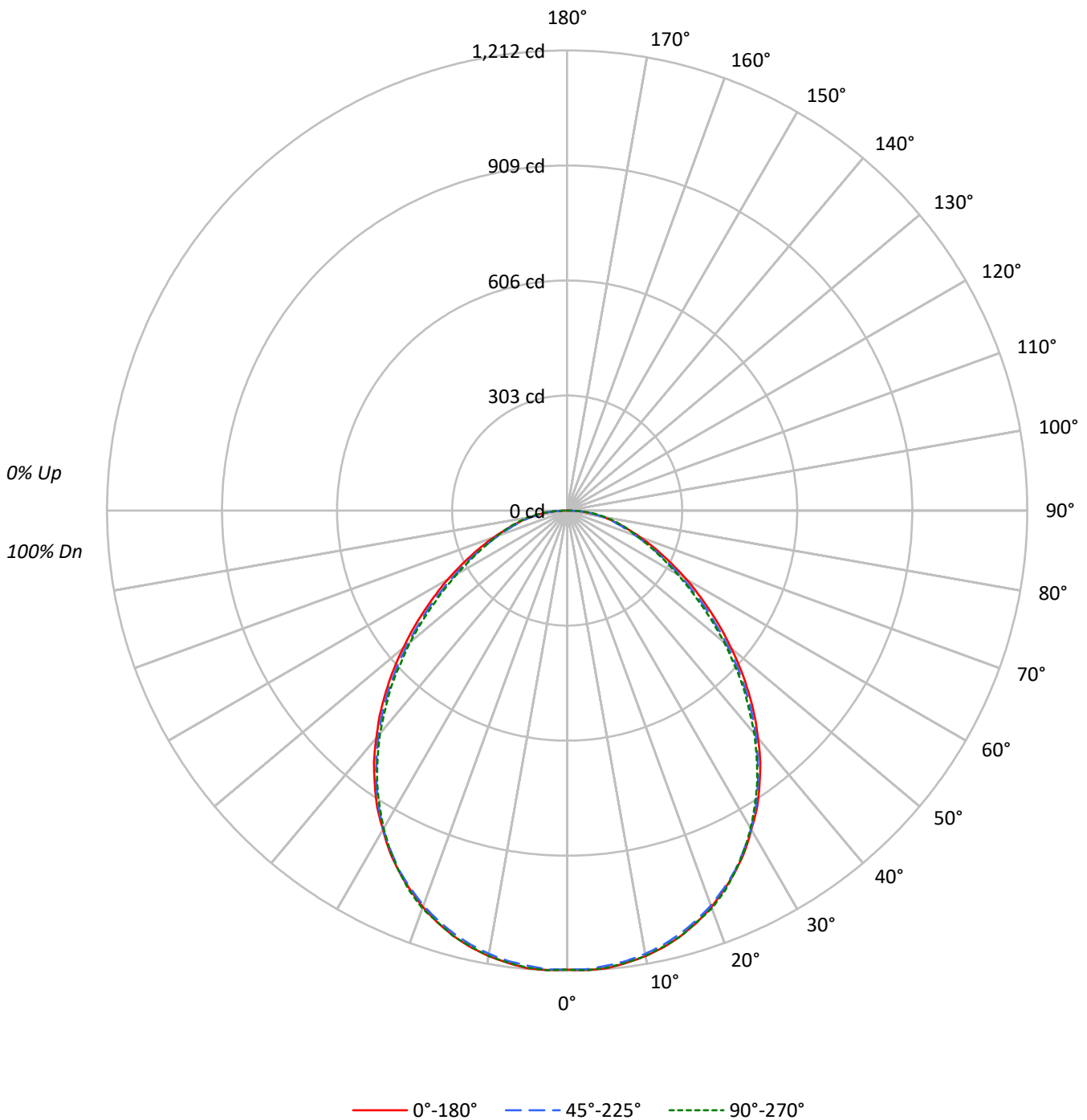
Input Watts (W): 22.785
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 24GR-LD5-34-F125-UNV-L92765-W2A1-U-3000K

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 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 98 | 95 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 77 | 74 | 72 |
| 3 | 92 | 82 | 74 | 68 | 90 | 80 | 73 | 68 | 78 | 71 | 66 | 75 | 70 | 65 | 72 | 68 | 64 | 62 |
| 4 | 85 | 73 | 65 | 59 | 82 | 72 | 64 | 58 | 70 | 63 | 57 | 67 | 61 | 57 | 65 | 60 | 56 | 54 |
| 5 | 78 | 66 | 57 | 51 | 76 | 65 | 57 | 51 | 63 | 56 | 50 | 61 | 55 | 50 | 59 | 54 | 49 | 47 |
| 6 | 72 | 60 | 51 | 45 | 71 | 59 | 51 | 45 | 57 | 50 | 44 | 55 | 49 | 44 | 54 | 48 | 44 | 42 |
| 7 | 67 | 54 | 46 | 40 | 66 | 54 | 46 | 40 | 52 | 45 | 40 | 51 | 44 | 39 | 49 | 44 | 39 | 37 |
| 8 | 63 | 50 | 42 | 36 | 61 | 49 | 41 | 36 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 35 | 33 |
| 9 | 59 | 46 | 38 | 33 | 58 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 30 |
| 10 | 55 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 29 | 39 | 33 | 29 | 28 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1627 | 1627 | 1627 |
| 5° | 1634 | 1625 | 1632 |
| 10° | 1628 | 1620 | 1627 |
| 15° | 1615 | 1606 | 1616 |
| 20° | 1591 | 1585 | 1596 |
| 25° | 1557 | 1553 | 1556 |
| 30° | 1507 | 1505 | 1501 |
| 35° | 1451 | 1440 | 1434 |
| 40° | 1373 | 1358 | 1347 |
| 45° | 1284 | 1261 | 1246 |
| 50° | 1180 | 1149 | 1129 |
| 55° | 1076 | 1037 | 1007 |
| 60° | 978 | 925 | 901 |
| 65° | 881 | 831 | 817 |
| 70° | 806 | 754 | 775 |
| 75° | 754 | 719 | 772 |
| 80° | 748 | 734 | 807 |
| 85° | 763 | 769 | 878 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 114.4 | 4.0 |
| 10°-20° | 325.3 | 11.4 |
| 20°-30° | 480.6 | 16.9 |
| 30°-40° | 546.4 | 19.2 |
| 40°-50° | 510.3 | 17.9 |
| 50°-60° | 396.8 | 13.9 |
| 60°-70° | 263.3 | 9.3 |
| 70°-80° | 152.4 | 5.4 |
| 80°-90° | 55.4 | 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° | 920.4 | 32.4 |
| 0°-40° | 1466.8 | 51.6 |
| 0°-60° | 2373.9 | 83.4 |
| 0°-90° | 2845.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2845.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1209 | 1209 | 1209 | 1209 | 1209 | |
| 5° | 1210 | 1204 | 1203 | 1206 | 1208 | 115 |
| 15° | 1159 | 1154 | 1153 | 1153 | 1160 | 327 |
| 25° | 1049 | 1044 | 1046 | 1044 | 1048 | 482 |
| 35° | 883 | 879 | 876 | 870 | 873 | 551 |
| 45° | 675 | 670 | 663 | 654 | 655 | 520 |
| 55° | 459 | 452 | 442 | 430 | 429 | 412 |
| 65° | 277 | 268 | 261 | 256 | 257 | 276 |
| 75° | 145 | 141 | 138 | 144 | 148 | 155 |
| 85° | 49 | 48 | 50 | 56 | 57 | 54 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P293342

CATALOG NUMBER: 24GR-LD5-34-F125-UNV-L92765-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1209.1 | 1209.1 | 1209.1 | 1209.1 | 1209.1 |
| 2.5° | 1210.9 | 1207.3 | 1209.1 | 1207.8 | 1211.8 |
| 5° | 1210.0 | 1203.8 | 1203.3 | 1205.6 | 1208.2 |
| 7.5° | 1201.6 | 1194.9 | 1196.2 | 1196.2 | 1200.7 |
| 10° | 1191.3 | 1184.7 | 1185.6 | 1186.0 | 1190.9 |
| 12.5° | 1177.6 | 1170.9 | 1171.3 | 1170.9 | 1175.8 |
| 15° | 1159.3 | 1153.5 | 1153.1 | 1152.6 | 1160.2 |
| 17.5° | 1137.1 | 1129.1 | 1131.7 | 1132.2 | 1136.2 |
| 20° | 1111.3 | 1105.1 | 1106.8 | 1106.4 | 1114.8 |
| 22.5° | 1080.6 | 1076.2 | 1077.5 | 1076.6 | 1084.6 |
| 25° | 1048.6 | 1044.1 | 1045.9 | 1043.7 | 1048.1 |
| 27.5° | 1012.6 | 1009.5 | 1007.7 | 1006.3 | 1009.5 |
| 30° | 970.3 | 968.5 | 968.5 | 962.8 | 966.3 |
| 32.5° | 930.3 | 924.5 | 924.5 | 922.3 | 920.1 |
| 35° | 883.2 | 878.7 | 876.5 | 870.3 | 872.9 |
| 37.5° | 836.0 | 825.8 | 824.9 | 820.0 | 820.0 |
| 40° | 781.8 | 776.0 | 772.9 | 767.5 | 766.7 |
| 42.5° | 730.2 | 724.4 | 719.1 | 710.2 | 708.4 |
| 45° | 675.0 | 669.7 | 662.6 | 654.1 | 654.6 |
| 47.5° | 620.3 | 612.8 | 606.1 | 595.9 | 594.6 |
| 50° | 563.9 | 558.5 | 548.8 | 539.9 | 539.4 |
| 52.5° | 511.0 | 502.5 | 493.6 | 482.9 | 482.9 |
| 55° | 458.9 | 452.3 | 442.0 | 430.5 | 429.1 |
| 57.5° | 409.1 | 402.9 | 391.3 | 382.9 | 380.7 |
| 60° | 363.3 | 354.4 | 343.7 | 336.6 | 334.9 |
| 62.5° | 317.5 | 309.5 | 301.5 | 294.4 | 293.9 |
| 65° | 276.6 | 268.2 | 261.0 | 256.1 | 256.6 |
| 67.5° | 239.7 | 232.6 | 224.6 | 223.2 | 223.7 |
| 70° | 205.0 | 197.4 | 191.7 | 194.8 | 197.0 |
| 72.5° | 172.1 | 168.1 | 164.1 | 168.5 | 171.7 |
| 75° | 145.0 | 141.4 | 138.3 | 144.5 | 148.5 |
| 77.5° | 120.1 | 117.4 | 117.0 | 122.3 | 125.8 |
| 80° | 96.5 | 93.4 | 94.7 | 100.9 | 104.1 |
| 82.5° | 73.4 | 71.2 | 71.6 | 79.2 | 81.4 |
| 85° | 49.4 | 48.5 | 49.8 | 56.5 | 56.9 |
| 87.5° | 26.2 | 26.2 | 27.1 | 31.1 | 29.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)