

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: P292095

Luminaire Tested: **22GR-LD5-32-F125-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33295)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-32-F125-UNV-L92765-W2A1-U-5500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F125 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3025.0 lumens
Efficiency: N/A
Efficacy: 120.0 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

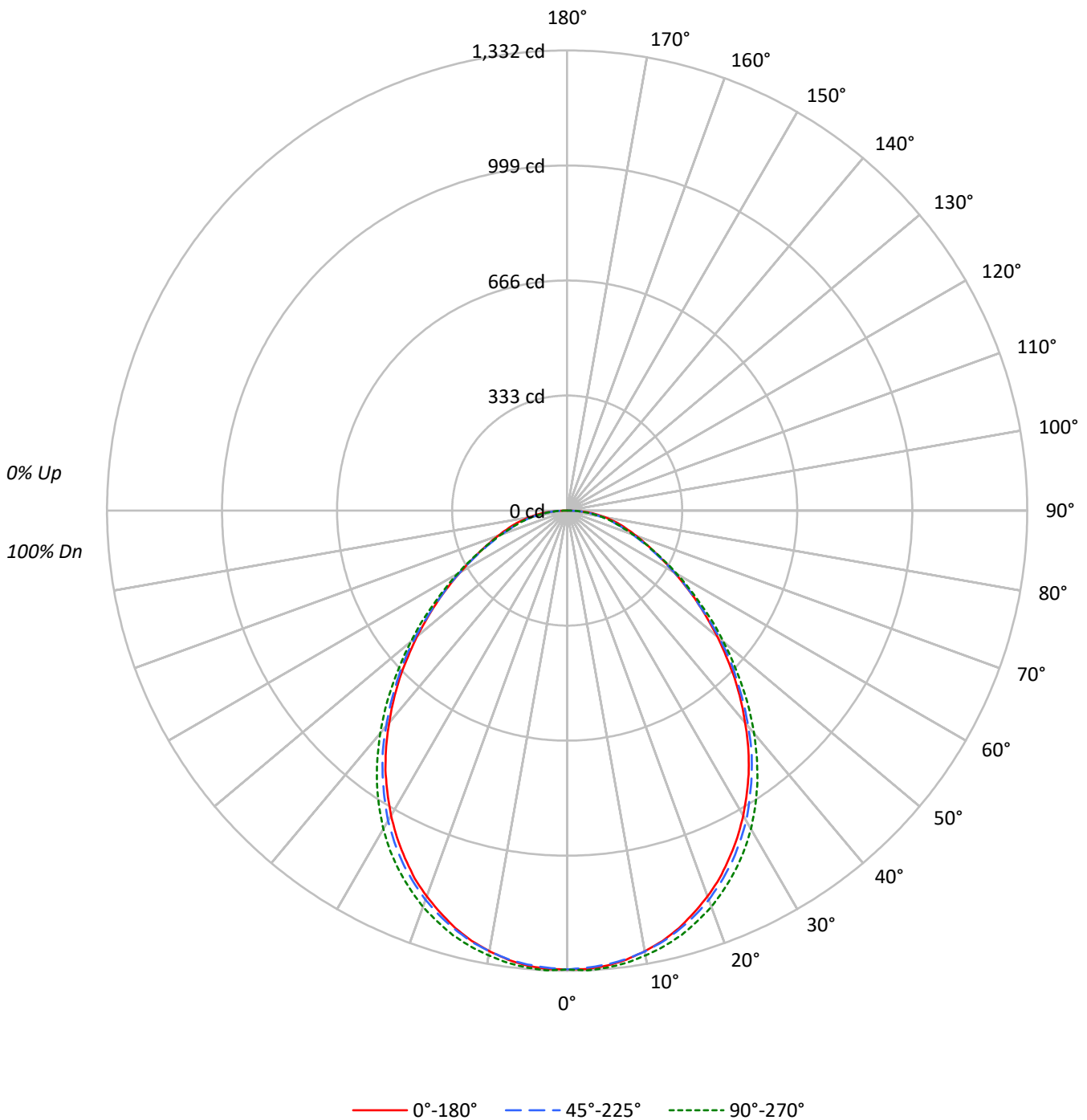
Input Watts (W): 25.203
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | | 106 | 106 | 106 | | 102 | 102 | 102 | 100 |
| 1 | 110 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | | 95 | 92 | 90 | | 91 | 89 | 87 | 85 |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | | 84 | 80 | 76 | | 81 | 78 | 75 | 73 |
| 3 | 92 | 82 | 75 | 69 | 90 | 81 | 74 | 68 | 78 | 72 | 67 | | 75 | 70 | 66 | | 73 | 68 | 65 | 62 |
| 4 | 85 | 74 | 65 | 59 | 83 | 72 | 65 | 59 | 70 | 63 | 58 | | 68 | 62 | 57 | | 65 | 60 | 56 | 54 |
| 5 | 78 | 66 | 58 | 52 | 76 | 65 | 57 | 51 | 63 | 56 | 51 | | 61 | 55 | 50 | | 59 | 54 | 50 | 48 |
| 6 | 73 | 60 | 52 | 45 | 71 | 59 | 51 | 45 | 57 | 50 | 45 | | 56 | 49 | 45 | | 54 | 49 | 44 | 42 |
| 7 | 68 | 55 | 46 | 41 | 66 | 54 | 46 | 40 | 53 | 45 | 40 | | 51 | 45 | 40 | | 50 | 44 | 40 | 38 |
| 8 | 63 | 50 | 42 | 36 | 62 | 50 | 42 | 36 | 48 | 41 | 36 | | 47 | 41 | 36 | | 46 | 40 | 36 | 34 |
| 9 | 59 | 46 | 38 | 33 | 58 | 46 | 38 | 33 | 45 | 38 | 33 | | 44 | 37 | 33 | | 43 | 37 | 33 | 31 |
| 10 | 56 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 35 | 30 | | 40 | 34 | 30 | | 40 | 34 | 30 | 28 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3574 | 3574 | 3574 |
| 5° | 3572 | 3563 | 3587 |
| 10° | 3539 | 3540 | 3573 |
| 15° | 3485 | 3496 | 3547 |
| 20° | 3403 | 3433 | 3495 |
| 25° | 3297 | 3343 | 3416 |
| 30° | 3167 | 3221 | 3306 |
| 35° | 3011 | 3060 | 3154 |
| 40° | 2816 | 2863 | 2956 |
| 45° | 2607 | 2647 | 2724 |
| 50° | 2374 | 2413 | 2474 |
| 55° | 2144 | 2150 | 2213 |
| 60° | 1923 | 1931 | 1976 |
| 65° | 1752 | 1716 | 1756 |
| 70° | 1668 | 1574 | 1601 |
| 75° | 1678 | 1518 | 1525 |
| 80° | 1740 | 1534 | 1523 |
| 85° | 1908 | 1624 | 1538 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 125.5 | 4.1 |
| 10°-20° | 354.4 | 11.7 |
| 20°-30° | 518.7 | 17.1 |
| 30°-40° | 583.2 | 19.3 |
| 40°-50° | 537.9 | 17.8 |
| 50°-60° | 414.5 | 13.7 |
| 60°-70° | 273.5 | 9.0 |
| 70°-80° | 159.2 | 5.3 |
| 80°-90° | 58.0 | 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° | 998.6 | 33.0 |
| 0°-40° | 1581.8 | 52.3 |
| 0°-60° | 2534.2 | 83.8 |
| 0°-90° | 3025.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3025.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1328 | 1328 | 1328 | 1328 | 1328 | |
| 5° | 1322 | 1320 | 1319 | 1325 | 1328 | 125 |
| 15° | 1251 | 1251 | 1255 | 1266 | 1273 | 352 |
| 25° | 1110 | 1116 | 1126 | 1141 | 1150 | 511 |
| 35° | 917 | 921 | 931 | 950 | 960 | 572 |
| 45° | 685 | 686 | 696 | 710 | 716 | 528 |
| 55° | 457 | 456 | 458 | 466 | 472 | 410 |
| 65° | 275 | 274 | 270 | 272 | 276 | 276 |
| 75° | 161 | 154 | 146 | 143 | 147 | 170 |
| 85° | 62 | 61 | 53 | 48 | 50 | 65 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P292095

CATALOG NUMBER: 22GR-LD5-32-F125-UNV-L92765-W2A1-U-5500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1328.0 | 1328.0 | 1328.0 | 1328.0 | 1328.0 |
| 2.5° | 1328.0 | 1325.2 | 1324.5 | 1329.4 | 1332.2 |
| 5° | 1322.4 | 1319.6 | 1318.9 | 1325.2 | 1328.0 |
| 7.5° | 1311.1 | 1309.0 | 1309.7 | 1316.8 | 1320.3 |
| 10° | 1295.0 | 1294.3 | 1295.7 | 1303.4 | 1307.6 |
| 12.5° | 1276.0 | 1275.3 | 1278.2 | 1286.6 | 1292.2 |
| 15° | 1250.8 | 1250.8 | 1255.0 | 1266.2 | 1273.2 |
| 17.5° | 1220.6 | 1222.7 | 1229.0 | 1240.3 | 1248.0 |
| 20° | 1188.3 | 1190.4 | 1198.8 | 1211.5 | 1220.6 |
| 22.5° | 1152.5 | 1155.3 | 1163.7 | 1179.2 | 1186.9 |
| 25° | 1110.4 | 1116.0 | 1125.8 | 1141.3 | 1150.4 |
| 27.5° | 1066.9 | 1073.2 | 1082.3 | 1101.3 | 1109.7 |
| 30° | 1019.2 | 1023.4 | 1036.7 | 1054.2 | 1064.1 |
| 32.5° | 968.6 | 972.8 | 984.1 | 1005.1 | 1013.5 |
| 35° | 916.7 | 920.9 | 931.4 | 950.4 | 960.2 |
| 37.5° | 860.5 | 864.0 | 876.7 | 891.4 | 901.9 |
| 40° | 801.6 | 806.5 | 814.9 | 832.4 | 841.6 |
| 42.5° | 744.0 | 746.1 | 755.2 | 772.8 | 779.8 |
| 45° | 685.1 | 685.8 | 695.6 | 709.6 | 715.9 |
| 47.5° | 624.0 | 625.4 | 637.3 | 645.7 | 652.1 |
| 50° | 567.1 | 567.8 | 576.3 | 584.0 | 591.0 |
| 52.5° | 510.3 | 510.3 | 514.5 | 522.9 | 532.0 |
| 55° | 456.9 | 456.2 | 458.3 | 466.1 | 471.7 |
| 57.5° | 406.4 | 405.7 | 408.5 | 413.4 | 417.6 |
| 60° | 357.3 | 355.9 | 358.7 | 361.5 | 367.1 |
| 62.5° | 313.7 | 315.2 | 311.6 | 315.9 | 320.1 |
| 65° | 275.1 | 273.7 | 269.5 | 271.6 | 275.8 |
| 67.5° | 242.2 | 240.0 | 233.0 | 234.4 | 239.3 |
| 70° | 212.0 | 207.8 | 200.0 | 200.0 | 203.5 |
| 72.5° | 184.6 | 180.4 | 170.6 | 171.3 | 172.7 |
| 75° | 161.4 | 154.4 | 146.0 | 143.2 | 146.7 |
| 77.5° | 136.2 | 130.6 | 122.8 | 120.7 | 122.1 |
| 80° | 112.3 | 108.1 | 99.0 | 96.2 | 98.3 |
| 82.5° | 89.1 | 85.6 | 75.1 | 73.0 | 73.7 |
| 85° | 61.8 | 61.1 | 52.6 | 48.4 | 49.8 |
| 87.5° | 33.0 | 33.7 | 27.4 | 24.6 | 26.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)