

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: P290921

Luminaire Tested: **14GR-LD5-32-F125-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290921  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33313)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-32-F125-UNV-L92765-W2A1-U-6500K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3103.0 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.24  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

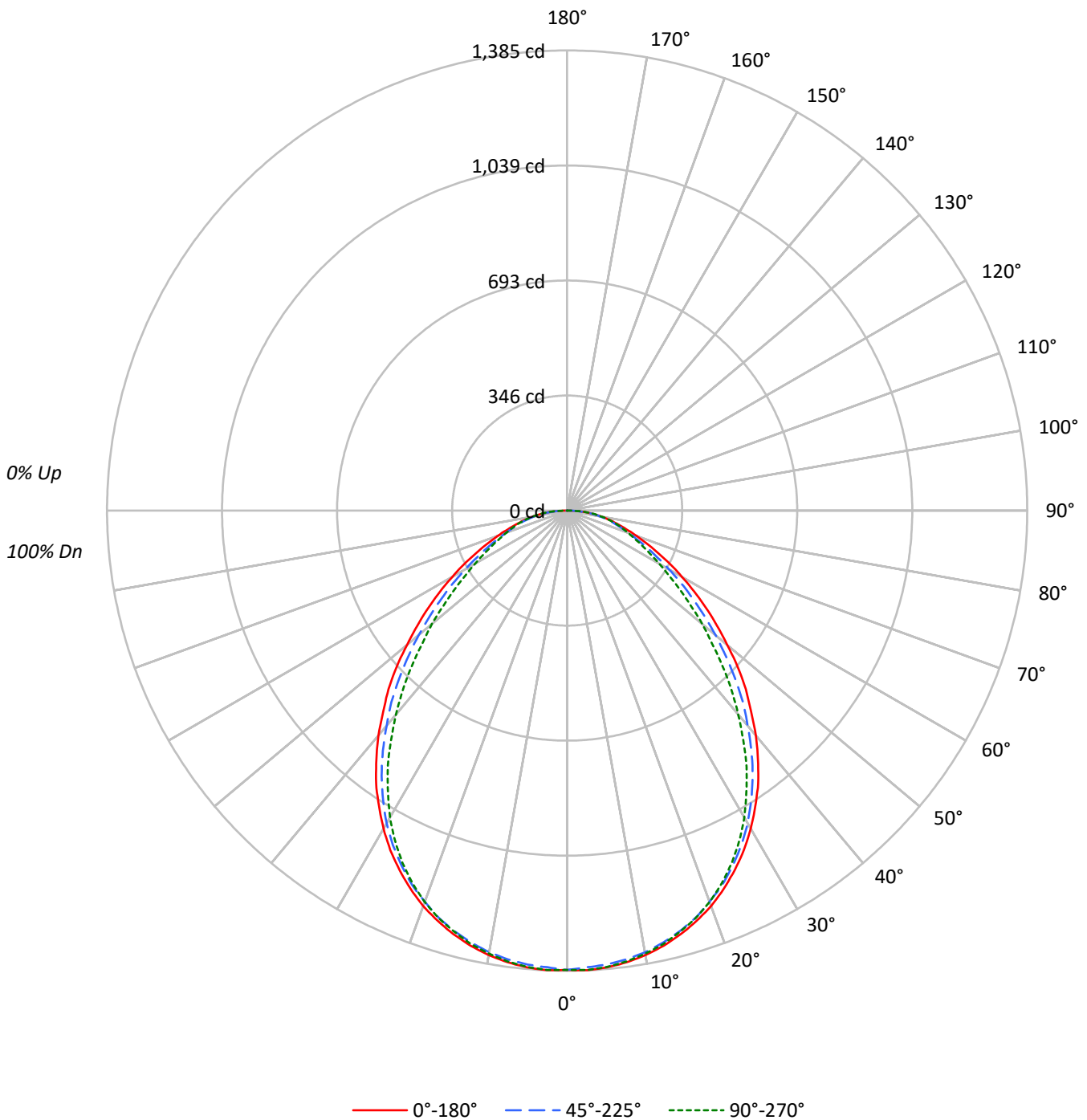
Input Watts (W): 26.877  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  | 95  | 92  | 90  | 91  | 89  | 88  | 85  |
| 2   | 101 | 93  | 87  | 81  | 98  | 91  | 85  | 80  | 88  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 73  |
| 3   | 92  | 83  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 69  | 65  | 63  |
| 4   | 85  | 74  | 66  | 59  | 83  | 73  | 65  | 59  | 70  | 64  | 58  | 68  | 62  | 58  | 66  | 61  | 57  | 55  |
| 5   | 79  | 67  | 58  | 52  | 77  | 66  | 58  | 52  | 64  | 57  | 51  | 62  | 55  | 51  | 60  | 54  | 50  | 48  |
| 6   | 73  | 60  | 52  | 46  | 71  | 60  | 52  | 46  | 58  | 51  | 45  | 56  | 50  | 45  | 55  | 49  | 45  | 43  |
| 7   | 68  | 55  | 47  | 41  | 66  | 54  | 47  | 41  | 53  | 46  | 41  | 51  | 45  | 40  | 50  | 44  | 40  | 38  |
| 8   | 64  | 51  | 43  | 37  | 62  | 50  | 42  | 37  | 49  | 42  | 37  | 47  | 41  | 36  | 46  | 41  | 36  | 34  |
| 9   | 60  | 47  | 39  | 34  | 58  | 46  | 39  | 33  | 45  | 38  | 33  | 44  | 38  | 33  | 43  | 37  | 33  | 31  |
| 10  | 56  | 43  | 36  | 31  | 55  | 43  | 35  | 31  | 42  | 35  | 30  | 41  | 35  | 30  | 40  | 34  | 30  | 28  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3720 | 3720 | 3720 |
| 5°  | 3728 | 3705 | 3724 |
| 10° | 3712 | 3688 | 3700 |
| 15° | 3679 | 3650 | 3656 |
| 20° | 3627 | 3587 | 3590 |
| 25° | 3544 | 3501 | 3477 |
| 30° | 3435 | 3377 | 3313 |
| 35° | 3295 | 3199 | 3094 |
| 40° | 3104 | 2970 | 2814 |
| 45° | 2894 | 2719 | 2517 |
| 50° | 2631 | 2439 | 2223 |
| 55° | 2396 | 2163 | 1938 |
| 60° | 2148 | 1905 | 1721 |
| 65° | 1915 | 1698 | 1582 |
| 70° | 1742 | 1547 | 1530 |
| 75° | 1628 | 1507 | 1582 |
| 80° | 1636 | 1557 | 1647 |
| 85° | 1711 | 1596 | 1822 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 130.7  | 4.2       |
| 10°-20°   | 370.6  | 11.9      |
| 20°-30°   | 543.3  | 17.5      |
| 30°-40°   | 606.4  | 19.5      |
| 40°-50°   | 549.0  | 17.7      |
| 50°-60°   | 414.5  | 13.4      |
| 60°-70°   | 271.0  | 8.7       |
| 70°-80°   | 159.2  | 5.1       |
| 80°-90°   | 58.3   | 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°    | 1044.6 | 33.7      |
| 0°-40°    | 1651.0 | 53.2      |
| 0°-60°    | 2614.6 | 84.3      |
| 0°-90°    | 3103.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3103.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1382 | 1382  | 1382 | 1382  | 1382 |      |
| 5°  | 1380 | 1377  | 1371 | 1380  | 1379 | 131  |
| 15° | 1320 | 1318  | 1310 | 1318  | 1312 | 372  |
| 25° | 1194 | 1189  | 1179 | 1177  | 1171 | 549  |
| 35° | 1003 | 994   | 974  | 952   | 942  | 625  |
| 45° | 760  | 749   | 714  | 676   | 661  | 584  |
| 55° | 511  | 499   | 461  | 425   | 413  | 457  |
| 65° | 301  | 291   | 267  | 251   | 248  | 302  |
| 75° | 157  | 152   | 145  | 148   | 152  | 168  |
| 85° | 55   | 53    | 52   | 58    | 59   | 59   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1382.4 | 1382.4 | 1382.4 | 1382.4 | 1382.4 |
| 2.5°  | 1384.6 | 1382.4 | 1375.8 | 1384.6 | 1383.8 |
| 5°    | 1380.2 | 1377.3 | 1371.4 | 1379.5 | 1378.7 |
| 7.5°  | 1371.4 | 1368.5 | 1362.7 | 1370.0 | 1368.5 |
| 10°   | 1358.3 | 1355.4 | 1349.6 | 1357.6 | 1354.0 |
| 12.5° | 1341.6 | 1338.7 | 1332.1 | 1339.4 | 1336.5 |
| 15°   | 1320.5 | 1318.3 | 1310.3 | 1317.5 | 1312.4 |
| 17.5° | 1295.0 | 1291.3 | 1285.5 | 1289.9 | 1286.2 |
| 20°   | 1266.6 | 1262.2 | 1252.7 | 1257.1 | 1253.5 |
| 22.5° | 1232.3 | 1226.5 | 1219.9 | 1219.9 | 1214.9 |
| 25°   | 1193.7 | 1189.4 | 1179.2 | 1177.0 | 1171.2 |
| 27.5° | 1152.2 | 1148.6 | 1135.5 | 1131.8 | 1121.6 |
| 30°   | 1105.6 | 1100.5 | 1086.7 | 1075.0 | 1066.3 |
| 32.5° | 1053.9 | 1050.2 | 1031.3 | 1016.0 | 1003.6 |
| 35°   | 1002.9 | 994.2  | 973.8  | 951.9  | 941.7  |
| 37.5° | 943.2  | 936.6  | 911.1  | 884.2  | 870.4  |
| 40°   | 883.5  | 875.5  | 845.6  | 815.7  | 801.2  |
| 42.5° | 818.6  | 811.4  | 783.0  | 747.3  | 732.0  |
| 45°   | 760.4  | 748.7  | 714.5  | 675.9  | 661.3  |
| 47.5° | 696.3  | 683.9  | 647.5  | 606.7  | 589.9  |
| 50°   | 628.5  | 620.5  | 582.7  | 543.3  | 531.0  |
| 52.5° | 568.1  | 555.7  | 520.0  | 481.4  | 468.3  |
| 55°   | 510.6  | 498.9  | 461.0  | 424.6  | 413.0  |
| 57.5° | 453.0  | 439.9  | 407.1  | 374.4  | 362.7  |
| 60°   | 399.1  | 386.0  | 354.0  | 327.0  | 319.7  |
| 62.5° | 350.3  | 335.8  | 307.4  | 286.2  | 281.1  |
| 65°   | 300.8  | 291.3  | 266.6  | 251.3  | 248.4  |
| 67.5° | 259.3  | 247.6  | 228.0  | 220.7  | 219.2  |
| 70°   | 221.4  | 213.4  | 196.6  | 194.5  | 194.5  |
| 72.5° | 187.2  | 180.6  | 168.2  | 169.7  | 171.9  |
| 75°   | 156.6  | 152.2  | 144.9  | 147.9  | 152.2  |
| 77.5° | 130.4  | 126.0  | 121.6  | 126.0  | 128.9  |
| 80°   | 105.6  | 101.2  | 100.5  | 104.2  | 106.3  |
| 82.5° | 79.4   | 75.7   | 76.5   | 82.3   | 84.5   |
| 85°   | 55.4   | 53.2   | 51.7   | 58.3   | 59.0   |
| 87.5° | 28.4   | 26.9   | 26.2   | 31.3   | 29.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)