

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: P293837

Luminaire Tested: **24GR-LD5-30-A125-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293837  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33307)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-30-A125-UNV-L92765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A125 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2488.0 lumens  
Efficiency: N/A  
Efficacy: 125.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

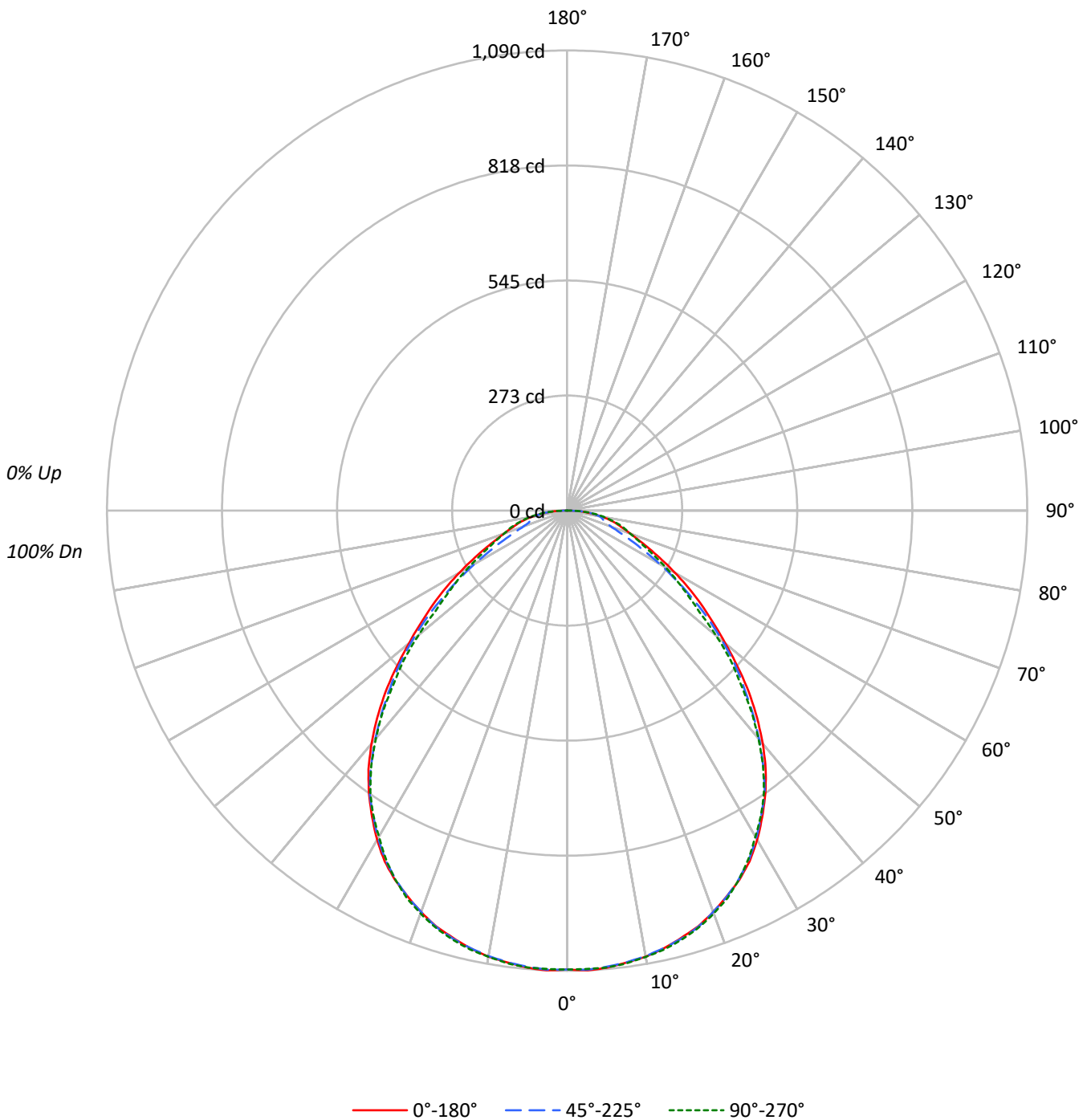
Input Watts (W): 19.809  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 100 | 96  | 99  | 96  | 93  | 95  | 93  | 90  | 91  | 90  | 88  | 86  |
| 2   | 101 | 93  | 87  | 82  | 98  | 91  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  |
| 3   | 93  | 83  | 76  | 70  | 90  | 82  | 75  | 69  | 79  | 73  | 68  | 76  | 71  | 67  | 73  | 69  | 66  | 64  |
| 4   | 86  | 75  | 66  | 60  | 83  | 73  | 66  | 60  | 71  | 64  | 59  | 68  | 63  | 58  | 66  | 61  | 57  | 55  |
| 5   | 79  | 67  | 59  | 53  | 77  | 66  | 58  | 52  | 64  | 57  | 52  | 62  | 56  | 51  | 60  | 55  | 51  | 49  |
| 6   | 73  | 61  | 53  | 47  | 72  | 60  | 52  | 46  | 58  | 51  | 46  | 57  | 50  | 46  | 55  | 50  | 45  | 43  |
| 7   | 68  | 56  | 47  | 42  | 67  | 55  | 47  | 41  | 53  | 46  | 41  | 52  | 46  | 41  | 51  | 45  | 41  | 39  |
| 8   | 64  | 51  | 43  | 37  | 62  | 50  | 43  | 37  | 49  | 42  | 37  | 48  | 41  | 37  | 47  | 41  | 37  | 35  |
| 9   | 60  | 47  | 39  | 34  | 58  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 33  | 43  | 38  | 33  | 32  |
| 10  | 56  | 44  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 40  | 35  | 30  | 29  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1463 | 1463 | 1463 |
| 5°  | 1468 | 1465 | 1467 |
| 10° | 1466 | 1464 | 1466 |
| 15° | 1459 | 1461 | 1465 |
| 20° | 1449 | 1449 | 1454 |
| 25° | 1432 | 1430 | 1431 |
| 30° | 1399 | 1392 | 1385 |
| 35° | 1344 | 1340 | 1335 |
| 40° | 1266 | 1243 | 1237 |
| 45° | 1158 | 1126 | 1106 |
| 50° | 1024 | 1003 | 964  |
| 55° | 910  | 848  | 816  |
| 60° | 793  | 679  | 728  |
| 65° | 684  | 526  | 644  |
| 70° | 624  | 431  | 623  |
| 75° | 630  | 464  | 662  |
| 80° | 656  | 604  | 697  |
| 85° | 682  | 719  | 773  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 103.1  | 4.1       |
| 10°-20°   | 295.8  | 11.9      |
| 20°-30°   | 442.7  | 17.8      |
| 30°-40°   | 505.9  | 20.3      |
| 40°-50°   | 457.4  | 18.4      |
| 50°-60°   | 329.1  | 13.2      |
| 60°-70°   | 190.8  | 7.7       |
| 70°-80°   | 113.2  | 4.5       |
| 80°-90°   | 50.1   | 2.0       |
| 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°    | 841.6  | 33.8      |
| 0°-40°    | 1347.5 | 54.2      |
| 0°-60°    | 2134.0 | 85.8      |
| 0°-90°    | 2488.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2488.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1087 | 1087  | 1087 | 1087  | 1087 |      |
| 5°  | 1087 | 1085  | 1084 | 1083  | 1086 | 103  |
| 15° | 1047 | 1049  | 1049 | 1048  | 1052 | 296  |
| 25° | 965  | 964   | 963  | 961   | 964  | 444  |
| 35° | 818  | 814   | 816  | 806   | 813  | 510  |
| 45° | 609  | 598   | 592  | 586   | 581  | 468  |
| 55° | 388  | 381   | 362  | 352   | 348  | 347  |
| 65° | 215  | 191   | 165  | 185   | 202  | 217  |
| 75° | 121  | 101   | 89   | 110   | 127  | 128  |
| 85° | 44   | 48    | 47   | 54    | 50   | 47   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1087.2 | 1087.2 | 1087.2 | 1087.2 | 1087.2 |
| 2.5°  | 1090.3 | 1086.4 | 1088.3 | 1087.2 | 1086.8 |
| 5°    | 1086.8 | 1085.2 | 1084.5 | 1082.9 | 1086.4 |
| 7.5°  | 1079.8 | 1078.6 | 1079.0 | 1079.4 | 1081.7 |
| 10°   | 1072.8 | 1070.9 | 1071.3 | 1072.0 | 1073.2 |
| 12.5° | 1061.9 | 1060.8 | 1061.2 | 1061.9 | 1064.7 |
| 15°   | 1047.2 | 1049.1 | 1049.1 | 1048.0 | 1051.8 |
| 17.5° | 1032.4 | 1032.1 | 1034.0 | 1030.5 | 1035.9 |
| 20°   | 1011.9 | 1012.3 | 1011.9 | 1012.3 | 1015.8 |
| 22.5° | 988.6  | 990.5  | 989.4  | 989.4  | 993.2  |
| 25°   | 964.9  | 963.7  | 963.0  | 961.0  | 963.7  |
| 27.5° | 936.6  | 934.2  | 932.3  | 928.4  | 930.4  |
| 30°   | 900.5  | 900.9  | 895.8  | 892.3  | 891.5  |
| 32.5° | 860.1  | 860.1  | 855.5  | 852.7  | 855.1  |
| 35°   | 818.2  | 814.3  | 815.9  | 805.8  | 812.8  |
| 37.5° | 772.8  | 766.6  | 763.1  | 759.6  | 761.9  |
| 40°   | 720.8  | 712.6  | 707.6  | 700.6  | 704.5  |
| 42.5° | 666.0  | 656.0  | 649.7  | 644.7  | 646.2  |
| 45°   | 608.6  | 598.1  | 591.9  | 586.5  | 581.0  |
| 47.5° | 548.0  | 541.5  | 538.3  | 531.4  | 525.1  |
| 50°   | 489.1  | 486.7  | 479.3  | 473.5  | 460.7  |
| 52.5° | 435.1  | 433.2  | 421.5  | 411.8  | 395.5  |
| 55°   | 388.1  | 380.8  | 361.7  | 352.4  | 347.8  |
| 57.5° | 340.4  | 328.4  | 305.5  | 304.3  | 307.4  |
| 60°   | 294.6  | 279.8  | 252.3  | 258.5  | 270.5  |
| 62.5° | 253.1  | 230.9  | 204.5  | 219.3  | 233.7  |
| 65°   | 215.0  | 191.0  | 165.3  | 184.8  | 202.2  |
| 67.5° | 183.6  | 159.5  | 133.1  | 159.1  | 179.3  |
| 70°   | 158.7  | 134.3  | 109.5  | 139.3  | 158.4  |
| 72.5° | 138.2  | 116.1  | 95.5   | 123.8  | 143.6  |
| 75°   | 121.1  | 101.3  | 89.3   | 110.2  | 127.3  |
| 77.5° | 104.0  | 88.1   | 85.4   | 98.2   | 108.7  |
| 80°   | 84.6   | 77.2   | 78.0   | 86.2   | 90.0   |
| 82.5° | 63.3   | 63.7   | 65.6   | 72.2   | 70.6   |
| 85°   | 44.2   | 47.7   | 46.6   | 53.6   | 50.1   |
| 87.5° | 24.5   | 26.8   | 25.2   | 30.7   | 27.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)