

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: P229419

Luminaire Tested: **22ALNG-LD5-40-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229419  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36087)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22ALNG-LD5-40-UNV-L840-CD1-SVPD1-U  
Description: METALUX 2X2 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR  
Light Source: (126)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

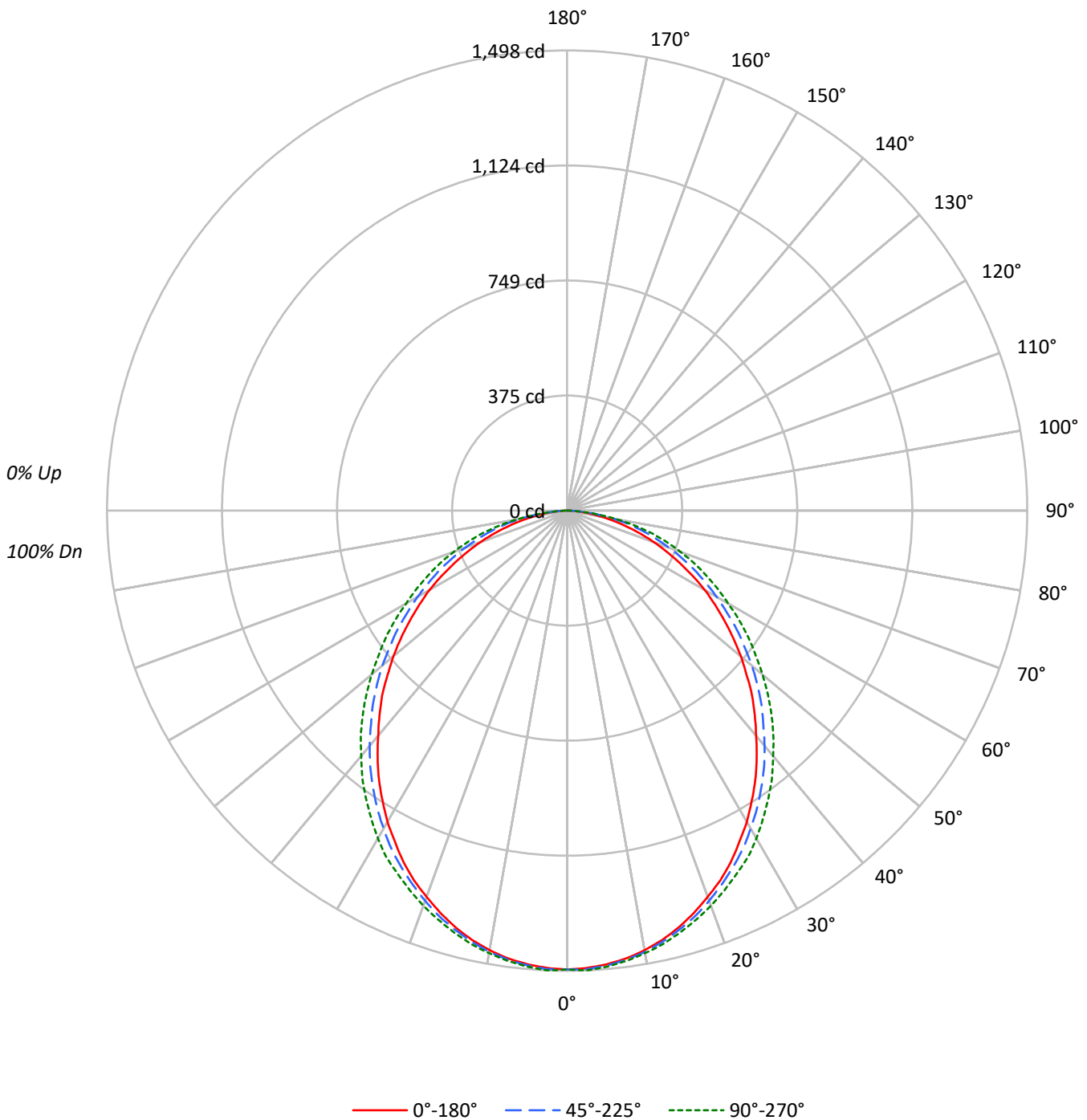
Lumens per Lamp: N/A  
Luminaire Lumens: 3885.0 lumens  
Efficiency: N/A  
Efficacy: 112.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.23 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.42  
Input Voltage (V): 120  
Input Current (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   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 98  | 95  | 92  | 94  | 91  | 89  | 90  | 88  | 86  | 84  |
| 2   | 99  | 91  | 84  | 79  | 97  | 89  | 83  | 78  | 86  | 80  | 76  | 82  | 78  | 74  | 79  | 76  | 73  | 70  |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 69  | 64  | 73  | 67  | 63  | 70  | 66  | 62  | 60  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 51  |
| 5   | 76  | 64  | 55  | 48  | 74  | 63  | 54  | 48  | 61  | 53  | 48  | 59  | 52  | 47  | 57  | 51  | 46  | 44  |
| 6   | 71  | 58  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  | 53  | 46  | 41  | 52  | 46  | 41  | 39  |
| 7   | 66  | 52  | 44  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 35  |
| 8   | 61  | 48  | 39  | 34  | 60  | 47  | 39  | 33  | 46  | 38  | 33  | 44  | 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°  | 4785 | 4785 | 4785 |
| 5°  | 4766 | 4778 | 4791 |
| 10° | 4725 | 4745 | 4757 |
| 15° | 4656 | 4682 | 4714 |
| 20° | 4560 | 4606 | 4666 |
| 25° | 4458 | 4520 | 4610 |
| 30° | 4326 | 4420 | 4557 |
| 35° | 4177 | 4307 | 4467 |
| 40° | 4001 | 4181 | 4360 |
| 45° | 3857 | 4051 | 4264 |
| 50° | 3678 | 3912 | 4136 |
| 55° | 3490 | 3762 | 4024 |
| 60° | 3315 | 3603 | 3878 |
| 65° | 3064 | 3463 | 3789 |
| 70° | 2817 | 3310 | 3676 |
| 75° | 2465 | 3142 | 3529 |
| 80° | 2053 | 2846 | 3026 |
| 85° | 1580 | 2010 | 1867 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 141.0  | 3.6       |
| 10°-20°   | 398.2  | 10.3      |
| 20°-30°   | 590.0  | 15.2      |
| 30°-40°   | 690.0  | 17.8      |
| 40°-50°   | 689.5  | 17.7      |
| 50°-60°   | 601.0  | 15.5      |
| 60°-70°   | 449.5  | 11.6      |
| 70°-80°   | 261.6  | 6.7       |
| 80°-90°   | 64.2   | 1.7       |
| 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°    | 1129.3 | 29.1      |
| 0°-40°    | 1819.2 | 46.8      |
| 0°-60°    | 3109.7 | 80.0      |
| 0°-90°    | 3885.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3885.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1494 | 1494  | 1494 | 1494  | 1494 |      |
| 5°  | 1482 | 1484  | 1486 | 1490  | 1490 | 141  |
| 15° | 1404 | 1406  | 1412 | 1418  | 1422 | 395  |
| 25° | 1262 | 1266  | 1279 | 1297  | 1305 | 580  |
| 35° | 1068 | 1076  | 1102 | 1133  | 1143 | 667  |
| 45° | 852  | 861   | 894  | 928   | 941  | 655  |
| 55° | 625  | 637   | 674  | 705   | 721  | 560  |
| 65° | 404  | 420   | 457  | 486   | 500  | 402  |
| 75° | 199  | 221   | 254  | 273   | 285  | 213  |
| 85° | 43   | 51    | 55   | 53    | 51   | 52   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1494.1 | 1494.1 | 1494.1 | 1494.1 | 1494.1 |
| 2.5°  | 1490.2 | 1490.2 | 1494.1 | 1496.1 | 1498.1 |
| 5°    | 1482.4 | 1484.4 | 1486.3 | 1490.2 | 1490.2 |
| 7.5°  | 1470.7 | 1472.7 | 1474.6 | 1478.5 | 1478.5 |
| 10°   | 1453.1 | 1455.1 | 1459.0 | 1462.9 | 1462.9 |
| 12.5° | 1431.6 | 1433.6 | 1437.5 | 1441.4 | 1445.3 |
| 15°   | 1404.3 | 1406.3 | 1412.1 | 1418.0 | 1421.9 |
| 17.5° | 1373.1 | 1377.0 | 1384.8 | 1392.6 | 1396.5 |
| 20°   | 1337.9 | 1341.8 | 1351.6 | 1365.2 | 1369.1 |
| 22.5° | 1302.7 | 1304.7 | 1316.4 | 1332.0 | 1337.9 |
| 25°   | 1261.7 | 1265.6 | 1279.3 | 1296.9 | 1304.7 |
| 27.5° | 1214.8 | 1220.7 | 1240.2 | 1261.7 | 1273.4 |
| 30°   | 1169.9 | 1173.8 | 1195.3 | 1222.7 | 1232.4 |
| 32.5° | 1119.1 | 1127.0 | 1150.4 | 1177.7 | 1187.5 |
| 35°   | 1068.4 | 1076.2 | 1101.6 | 1132.8 | 1142.6 |
| 37.5° | 1013.7 | 1021.5 | 1052.7 | 1084.0 | 1095.7 |
| 40°   | 957.0  | 968.8  | 1000.0 | 1033.2 | 1043.0 |
| 42.5° | 904.3  | 914.1  | 945.3  | 978.5  | 994.1  |
| 45°   | 851.6  | 861.3  | 894.5  | 927.7  | 941.4  |
| 47.5° | 793.0  | 802.7  | 839.8  | 873.0  | 886.7  |
| 50°   | 738.3  | 748.0  | 785.2  | 818.4  | 830.1  |
| 52.5° | 681.6  | 693.4  | 726.6  | 761.7  | 773.4  |
| 55°   | 625.0  | 636.7  | 673.8  | 705.1  | 720.7  |
| 57.5° | 570.3  | 584.0  | 615.2  | 648.4  | 664.1  |
| 60°   | 517.6  | 527.3  | 562.5  | 593.8  | 605.5  |
| 62.5° | 460.9  | 472.7  | 507.8  | 541.0  | 552.7  |
| 65°   | 404.3  | 419.9  | 457.0  | 486.3  | 500.0  |
| 67.5° | 351.6  | 367.2  | 404.3  | 431.6  | 447.3  |
| 70°   | 300.8  | 316.4  | 353.5  | 378.9  | 392.6  |
| 72.5° | 250.0  | 269.5  | 302.7  | 326.2  | 337.9  |
| 75°   | 199.2  | 220.7  | 253.9  | 273.4  | 285.2  |
| 77.5° | 154.3  | 175.8  | 205.1  | 222.7  | 226.6  |
| 80°   | 111.3  | 132.8  | 154.3  | 162.1  | 164.1  |
| 82.5° | 76.2   | 91.8   | 103.5  | 103.5  | 107.4  |
| 85°   | 43.0   | 50.8   | 54.7   | 52.7   | 50.8   |
| 87.5° | 15.6   | 17.6   | 15.6   | 9.8    | 9.8    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)