

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: P#

Luminaire Tested: **4ILED-LD5-7-W-TWBWG-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34176)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4ILED-LD5-7-W-TWBWG-UNV-L835-CD1-U  
Description: Metalux 4' ILED WITH THIN WHITE BAFFLE-HEAVY DUTY WIREGUARD  
DISTRIBUTION

Light Source: (1) 3500 CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5985.0 lumens  
Efficiency: N/A  
Efficacy: 118.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.24 / 1.28  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

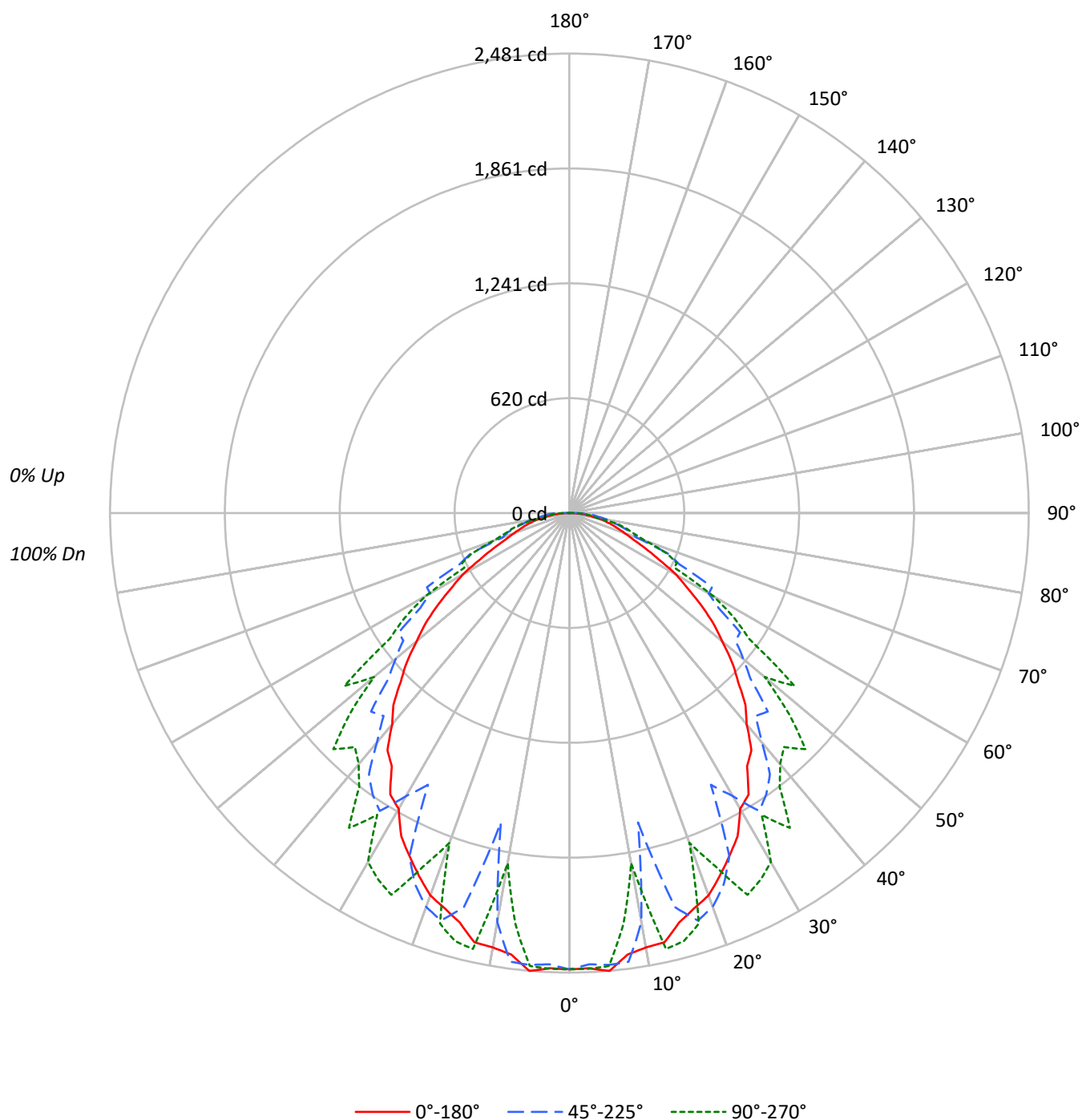
Input Watts (W): 50.4  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |     |     |     |    | 0  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 10 |
| 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 | 102 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 90  | 91  | 89  | 87  | 85  |    |    |
| 2   | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 87  | 82  | 77  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |    |    |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 67  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  | 61  |    |    |
| 4   | 84  | 72  | 64  | 57  | 82  | 71  | 63  | 57  | 69  | 62  | 56  | 66  | 60  | 55  | 64  | 59  | 55  | 53  |    |    |
| 5   | 77  | 65  | 56  | 50  | 75  | 64  | 56  | 49  | 62  | 54  | 49  | 60  | 53  | 48  | 58  | 52  | 48  | 46  |    |    |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 49  | 43  | 56  | 48  | 43  | 54  | 48  | 43  | 53  | 47  | 42  | 40  |    |    |
| 7   | 66  | 53  | 45  | 39  | 65  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 38  | 36  |    |    |
| 8   | 62  | 49  | 40  | 34  | 60  | 48  | 40  | 34  | 47  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 34  | 32  |    |    |
| 9   | 58  | 45  | 37  | 31  | 56  | 44  | 36  | 31  | 43  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 29  |    |    |
| 10  | 54  | 41  | 33  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 28  | 26  |    |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7231 | 7231 | 7231 |
| 5°  | 7296 | 7157 | 7165 |
| 10° | 7067 | 6572 | 5615 |
| 15° | 6912 | 6528 | 7062 |
| 20° | 6801 | 6833 | 5691 |
| 25° | 6541 | 6340 | 7013 |
| 30° | 6163 | 5670 | 6938 |
| 35° | 5887 | 6227 | 6910 |
| 40° | 5589 | 5740 | 6213 |
| 45° | 5218 | 5748 | 6750 |
| 50° | 4778 | 5028 | 5562 |
| 55° | 4290 | 5072 | 5244 |
| 60° | 3746 | 4378 | 4433 |
| 65° | 2991 | 3771 | 3597 |
| 70° | 2555 | 2615 | 2857 |
| 75° | 2398 | 2497 | 2541 |
| 80° | 2163 | 2331 | 1506 |
| 85° | 1902 | 2069 | 1432 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 224.6  | 3.8       |
| 10°-20°   | 630.3  | 10.5      |
| 20°-30°   | 911.2  | 15.2      |
| 30°-40°   | 1141.2 | 19.1      |
| 40°-50°   | 1110.8 | 18.6      |
| 50°-60°   | 950.9  | 15.9      |
| 60°-70°   | 589.9  | 9.9       |
| 70°-80°   | 307.0  | 5.1       |
| 80°-90°   | 119.2  | 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°    | 1766.1 | 29.5      |
| 0°-40°    | 2907.2 | 48.6      |
| 0°-60°    | 4968.9 | 83.0      |
| 0°-90°    | 5985.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5985.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2463 | 2463  | 2463 | 2463  | 2463 |      |
| 5°  | 2481 | 2474  | 2449 | 2439  | 2455 | 232  |
| 15° | 2289 | 2298  | 2202 | 2404  | 2392 | 648  |
| 25° | 2043 | 1693  | 2044 | 2101  | 2275 | 939  |
| 35° | 1671 | 1742  | 1853 | 1838  | 2075 | 1056 |
| 45° | 1288 | 1157  | 1516 | 1550  | 1803 | 997  |
| 55° | 868  | 950   | 1125 | 1343  | 1184 | 776  |
| 65° | 454  | 509   | 653  | 553   | 639  | 460  |
| 75° | 231  | 268   | 298  | 320   | 315  | 245  |
| 85° | 73   | 96    | 128  | 147   | 96   | 78   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2463.2 | 2463.2 | 2463.2 | 2463.2 | 2463.2 |
| 2.5°  | 2460.4 | 2449.9 | 2438.4 | 2458.4 | 2462.3 |
| 5°    | 2481.4 | 2473.7 | 2448.9 | 2439.3 | 2454.6 |
| 7.5°  | 2404.0 | 2420.2 | 2443.2 | 2319.0 | 2238.8 |
| 10°   | 2381.1 | 2372.5 | 2241.6 | 1725.9 | 1919.8 |
| 12.5° | 2373.4 | 2362.9 | 1711.6 | 2399.2 | 2410.7 |
| 15°   | 2289.4 | 2298.0 | 2202.5 | 2404.0 | 2391.6 |
| 17.5° | 2237.8 | 2119.4 | 2306.6 | 2346.7 | 2324.7 |
| 20°   | 2196.7 | 1847.2 | 2262.7 | 2155.7 | 1894.0 |
| 22.5° | 2121.3 | 1575.0 | 2174.8 | 1729.7 | 2065.9 |
| 25°   | 2043.0 | 1693.4 | 2043.9 | 2101.2 | 2275.1 |
| 27.5° | 1967.5 | 1918.8 | 1653.3 | 2192.9 | 2234.0 |
| 30°   | 1844.3 | 1902.6 | 1764.1 | 2147.1 | 2175.7 |
| 32.5° | 1801.3 | 1816.6 | 1907.4 | 2027.7 | 1932.2 |
| 35°   | 1671.4 | 1742.1 | 1852.9 | 1837.6 | 2075.4 |
| 37.5° | 1614.1 | 1634.2 | 1778.4 | 1935.0 | 1864.4 |
| 40°   | 1489.0 | 1519.6 | 1617.0 | 1709.6 | 1769.8 |
| 42.5° | 1407.8 | 1305.6 | 1486.1 | 1657.1 | 1714.4 |
| 45°   | 1288.4 | 1156.6 | 1515.8 | 1550.1 | 1803.2 |
| 47.5° | 1191.0 | 1149.0 | 1326.6 | 1613.2 | 1613.2 |
| 50°   | 1077.4 | 1132.8 | 1225.4 | 1441.3 | 1376.3 |
| 52.5° | 979.9  | 1055.4 | 1130.8 | 1253.1 | 1532.9 |
| 55°   | 868.2  | 950.3  | 1125.1 | 1342.9 | 1184.3 |
| 57.5° | 758.4  | 828.1  | 955.1  | 1028.7 | 1056.3 |
| 60°   | 665.7  | 733.5  | 868.2  | 924.5  | 897.8  |
| 62.5° | 546.3  | 632.3  | 868.2  | 728.7  | 639.0  |
| 65°   | 453.7  | 509.1  | 653.3  | 553.0  | 639.0  |
| 67.5° | 372.5  | 429.8  | 580.7  | 533.9  | 569.2  |
| 70°   | 318.1  | 359.1  | 384.0  | 477.6  | 432.7  |
| 72.5° | 272.2  | 301.8  | 351.5  | 361.0  | 359.1  |
| 75°   | 231.1  | 268.4  | 298.0  | 320.0  | 315.2  |
| 77.5° | 192.0  | 244.5  | 245.5  | 294.2  | 256.0  |
| 80°   | 146.1  | 167.1  | 212.0  | 192.0  | 144.2  |
| 82.5° | 107.0  | 130.8  | 161.4  | 166.2  | 127.0  |
| 85°   | 72.6   | 96.5   | 128.0  | 147.1  | 95.5   |
| 87.5° | 33.4   | 65.9   | 104.1  | 131.8  | 86.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)