

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-LD5-9-W-CLWG-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 (P34178)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4ILED-LD5-9-W-CLWG-UNV-L835-CD1-U  
Description: Metalux 4' ILED WITH CLEAR ACRYLIC LENS & FRAME-HEAVY DUTY WIREGUARD  
DISTRIBUTION

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

**Summary**

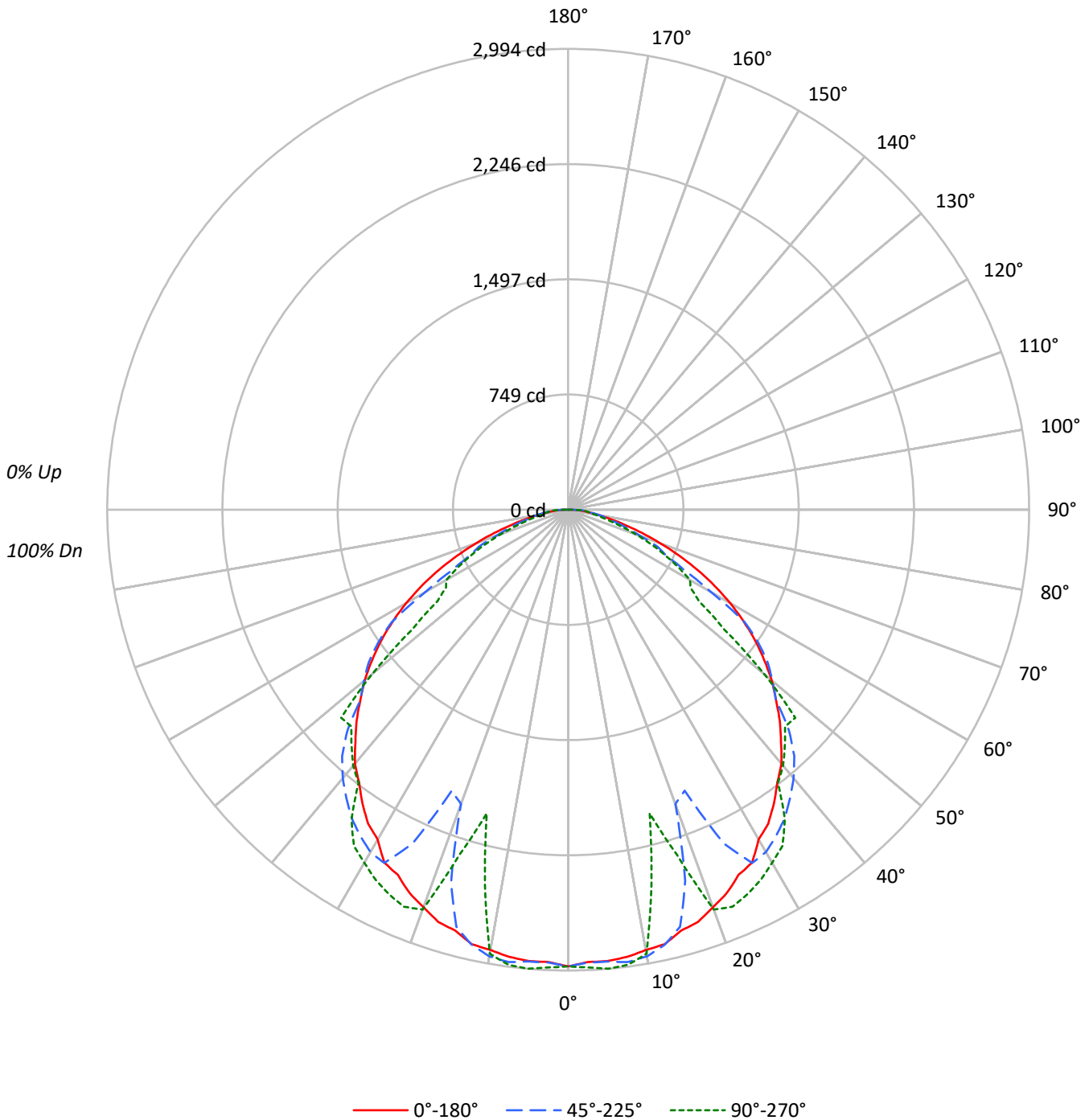
Lumens per Lamp: N/A  
Luminaire Lumens: 7683.0 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.32 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 65.7  
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  |     |     |     | 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 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 98  | 95  | 93  | 95  | 92  | 90  | 91  | 89  | 87  | 85  |
| 2   | 100 | 92  | 86  | 80  | 97  | 90  | 84  | 79  | 87  | 82  | 77  | 83  | 79  | 76  | 80  | 77  | 74  | 72  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 67  | 77  | 71  | 65  | 74  | 69  | 64  | 72  | 67  | 63  | 61  |
| 4   | 84  | 72  | 64  | 57  | 82  | 71  | 63  | 57  | 68  | 62  | 56  | 66  | 60  | 55  | 64  | 59  | 55  | 52  |
| 5   | 77  | 65  | 56  | 49  | 75  | 64  | 55  | 49  | 61  | 54  | 49  | 59  | 53  | 48  | 58  | 52  | 48  | 46  |
| 6   | 71  | 58  | 50  | 43  | 69  | 57  | 49  | 43  | 56  | 48  | 43  | 54  | 47  | 42  | 52  | 46  | 42  | 40  |
| 7   | 66  | 53  | 44  | 38  | 64  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 42  | 38  | 48  | 42  | 37  | 35  |
| 8   | 62  | 48  | 40  | 34  | 60  | 48  | 40  | 34  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 33  | 31  |
| 9   | 58  | 44  | 36  | 31  | 56  | 44  | 36  | 31  | 43  | 35  | 30  | 41  | 35  | 30  | 40  | 34  | 30  | 28  |
| 10  | 54  | 41  | 33  | 28  | 53  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 27  | 38  | 32  | 27  | 26  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8710 | 8710 | 8710 |
| 5°  | 8656 | 8611 | 8739 |
| 10° | 8621 | 8638 | 8567 |
| 15° | 8548 | 8316 | 6030 |
| 20° | 8509 | 6145 | 8307 |
| 25° | 8383 | 7421 | 8494 |
| 30° | 8267 | 8253 | 8446 |
| 35° | 8203 | 8232 | 8168 |
| 40° | 8087 | 8085 | 7624 |
| 45° | 7876 | 7689 | 7453 |
| 50° | 7650 | 7103 | 6735 |
| 55° | 7331 | 6797 | 4587 |
| 60° | 6838 | 5426 | 4512 |
| 65° | 6121 | 4028 | 3887 |
| 70° | 5095 | 3422 | 3085 |
| 75° | 3948 | 2729 | 2271 |
| 80° | 2945 | 2306 | 1733 |
| 85° | 2525 | 1933 | 1737 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 281.7  | 3.7       |
| 10°-20°   | 746.6  | 9.7       |
| 20°-30°   | 1190.5 | 15.5      |
| 30°-40°   | 1428.9 | 18.6      |
| 40°-50°   | 1519.6 | 19.8      |
| 50°-60°   | 1243.2 | 16.2      |
| 60°-70°   | 788.2  | 10.3      |
| 70°-80°   | 364.1  | 4.7       |
| 80°-90°   | 120.1  | 1.6       |
| 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°    | 2218.8 | 28.9      |
| 0°-40°    | 3647.7 | 47.5      |
| 0°-60°    | 6410.5 | 83.4      |
| 0°-90°    | 7683.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7683.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2967 | 2967  | 2967 | 2967  | 2967 |      |
| 5°  | 2944 | 2945  | 2946 | 2969  | 2994 | 280  |
| 15° | 2832 | 2876  | 2806 | 2211  | 2042 | 802  |
| 25° | 2618 | 2625  | 2392 | 2732  | 2756 | 1213 |
| 35° | 2329 | 1746  | 2450 | 2496  | 2453 | 1455 |
| 45° | 1945 | 1953  | 2028 | 1978  | 1991 | 1498 |
| 55° | 1484 | 1562  | 1508 | 1169  | 1036 | 1321 |
| 65° | 928  | 944   | 698  | 703   | 690  | 915  |
| 75° | 381  | 361   | 326  | 301   | 282  | 417  |
| 85° | 96   | 105   | 120  | 120   | 116  | 104  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2967.0 | 2967.0 | 2967.0 | 2967.0 | 2967.0 |
| 2.5°  | 2941.3 | 2946.2 | 2945.0 | 2967.0 | 2976.7 |
| 5°    | 2943.8 | 2945.0 | 2946.2 | 2969.4 | 2993.8 |
| 7.5°  | 2930.4 | 2956.0 | 2964.5 | 2956.0 | 2981.6 |
| 10°   | 2904.7 | 2927.9 | 2946.2 | 2920.6 | 2929.1 |
| 12.5° | 2891.3 | 2925.5 | 2895.0 | 2769.3 | 2496.1 |
| 15°   | 2831.5 | 2875.5 | 2805.9 | 2210.6 | 2042.2 |
| 17.5° | 2807.2 | 2836.4 | 2529.0 | 2032.5 | 2350.9 |
| 20°   | 2748.6 | 2788.9 | 2034.9 | 2613.2 | 2764.5 |
| 22.5° | 2694.9 | 2724.2 | 1975.1 | 2748.6 | 2791.3 |
| 25°   | 2618.1 | 2625.4 | 2392.4 | 2731.5 | 2755.9 |
| 27.5° | 2585.1 | 2475.3 | 2587.6 | 2696.1 | 2709.6 |
| 30°   | 2474.1 | 2248.4 | 2568.0 | 2647.3 | 2648.6 |
| 32.5° | 2418.0 | 1958.1 | 2513.1 | 2576.6 | 2590.0 |
| 35°   | 2328.9 | 1745.8 | 2449.7 | 2496.1 | 2453.4 |
| 37.5° | 2231.3 | 1715.3 | 2365.5 | 2341.1 | 2237.4 |
| 40°   | 2154.5 | 1871.4 | 2277.7 | 2126.4 | 2171.5 |
| 42.5° | 2045.9 | 1966.6 | 2172.8 | 2073.9 | 2082.5 |
| 45°   | 1944.6 | 1953.2 | 2027.6 | 1977.6 | 1991.0 |
| 47.5° | 1830.0 | 1886.1 | 1828.7 | 1894.6 | 2000.8 |
| 50°   | 1725.0 | 1784.8 | 1731.1 | 1839.7 | 1666.5 |
| 52.5° | 1605.5 | 1679.9 | 1634.8 | 1479.8 | 1278.5 |
| 55°   | 1483.5 | 1561.6 | 1507.9 | 1168.7 | 1035.8 |
| 57.5° | 1350.5 | 1415.2 | 1359.0 | 957.7  | 940.6  |
| 60°   | 1215.1 | 1266.3 | 1076.0 | 872.3  | 913.8  |
| 62.5° | 1072.4 | 1104.1 | 849.1  | 804.0  | 801.5  |
| 65°   | 928.4  | 944.3  | 697.8  | 702.7  | 690.5  |
| 67.5° | 778.3  | 785.7  | 628.3  | 595.3  | 577.0  |
| 70°   | 634.4  | 629.5  | 502.6  | 484.3  | 467.2  |
| 72.5° | 502.6  | 479.4  | 408.7  | 384.3  | 363.6  |
| 75°   | 380.6  | 361.1  | 325.7  | 301.3  | 281.8  |
| 77.5° | 283.0  | 272.1  | 255.0  | 257.4  | 215.9  |
| 80°   | 198.9  | 200.1  | 209.8  | 178.1  | 165.9  |
| 82.5° | 137.9  | 145.2  | 150.1  | 147.6  | 144.0  |
| 85°   | 96.4   | 104.9  | 119.6  | 119.6  | 115.9  |
| 87.5° | 48.8   | 72.0   | 96.4   | 102.5  | 100.0  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)