

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: P412825

Luminaire Tested: **24PD-100-PP3-L927**

Issue Date: 9/15/2020



**Test Information**

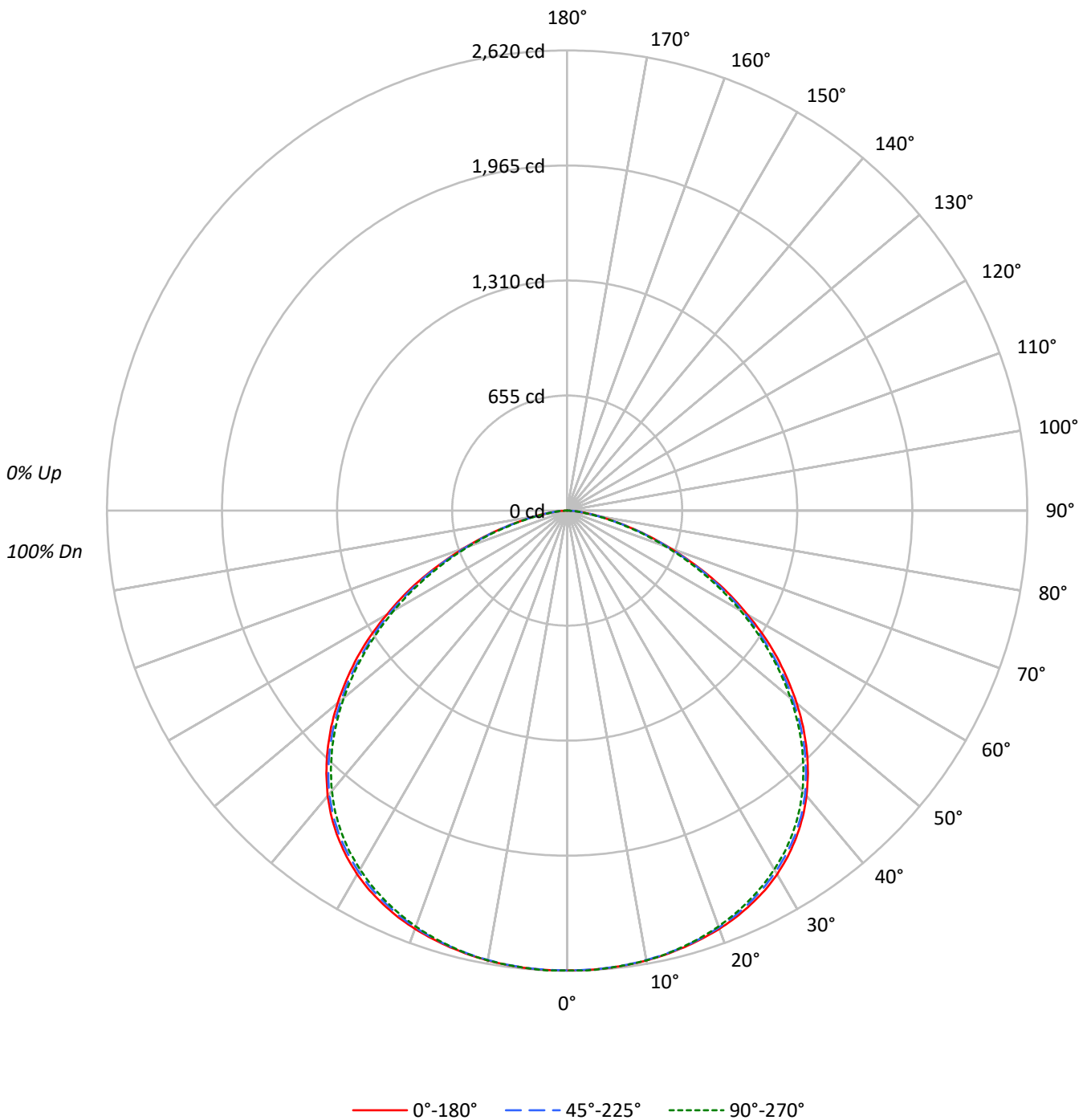
Test Method: LM-79-08  
Report Number: P412825  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-100-PP3-L927  
Description: 10000 LUMEN 2X4 PERCEIVE LED TROFFER WITH PRISM PATTERN OPTICS AND 90 CRI, 2700 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7618.0 lumens  
Efficiency: N/A  
Efficacy: 98.4 lumens/watt  
Spacing Criteria (0/90/45): 1.35 / 1.33 / 1.43  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 77.4  
Input Voltage (V): NR  
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  | 85  | 80  | 97  | 90  | 84  | 79  | 86  | 81  | 77  |  | 83  | 79  | 75  |  | 80  | 77  | 74  | 71  |
| 3   | 91  | 81  | 73  | 66  | 89  | 79  | 72  | 66  | 76  | 70  | 65  |  | 73  | 68  | 64  |  | 71  | 66  | 63  | 60  |
| 4   | 83  | 72  | 63  | 56  | 81  | 70  | 62  | 56  | 68  | 61  | 55  |  | 65  | 59  | 54  |  | 63  | 58  | 54  | 52  |
| 5   | 77  | 64  | 55  | 49  | 75  | 63  | 54  | 48  | 61  | 53  | 48  |  | 59  | 52  | 47  |  | 57  | 51  | 47  | 45  |
| 6   | 71  | 58  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  |  | 53  | 46  | 41  |  | 52  | 46  | 41  | 39  |
| 7   | 66  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  |  | 48  | 42  | 37  |  | 47  | 41  | 36  | 34  |
| 8   | 61  | 47  | 39  | 33  | 59  | 47  | 39  | 33  | 45  | 38  | 33  |  | 44  | 38  | 33  |  | 43  | 37  | 32  | 31  |
| 9   | 57  | 44  | 35  | 30  | 55  | 43  | 35  | 30  | 42  | 35  | 30  |  | 41  | 34  | 29  |  | 40  | 34  | 29  | 27  |
| 10  | 53  | 40  | 32  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  |  | 38  | 31  | 27  |  | 37  | 31  | 27  | 25  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3523 | 3523 | 3523 |
| 5°  | 3532 | 3531 | 3533 |
| 10° | 3554 | 3550 | 3553 |
| 15° | 3585 | 3580 | 3578 |
| 20° | 3629 | 3617 | 3608 |
| 25° | 3674 | 3655 | 3638 |
| 30° | 3715 | 3689 | 3665 |
| 35° | 3735 | 3713 | 3679 |
| 40° | 3725 | 3703 | 3661 |
| 45° | 3672 | 3636 | 3595 |
| 50° | 3571 | 3514 | 3477 |
| 55° | 3423 | 3341 | 3298 |
| 60° | 3190 | 3134 | 3071 |
| 65° | 2891 | 2833 | 2751 |
| 70° | 2468 | 2423 | 2345 |
| 75° | 1927 | 1907 | 1816 |
| 80° | 1422 | 1363 | 1286 |
| 85° | 858  | 858  | 800  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 249.1  | 3.3       |
| 10°-20°   | 726.8  | 9.5       |
| 20°-30°   | 1136.1 | 14.9      |
| 30°-40°   | 1411.9 | 18.5      |
| 40°-50°   | 1471.1 | 19.3      |
| 50°-60°   | 1276.5 | 16.8      |
| 60°-70°   | 877.7  | 11.5      |
| 70°-80°   | 396.1  | 5.2       |
| 80°-90°   | 72.6   | 1.0       |
| 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°    | 2112.0 | 27.7      |
| 0°-40°    | 3523.9 | 46.3      |
| 0°-60°    | 6271.5 | 82.3      |
| 0°-90°    | 7618.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7618.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2618 | 2618  | 2618 | 2618  | 2618 |      |
| 5°  | 2615 | 2616  | 2614 | 2612  | 2616 | 249  |
| 15° | 2574 | 2574  | 2570 | 2568  | 2569 | 728  |
| 25° | 2475 | 2474  | 2462 | 2452  | 2451 | 1142 |
| 35° | 2274 | 2274  | 2260 | 2247  | 2240 | 1421 |
| 45° | 1930 | 1931  | 1911 | 1896  | 1890 | 1485 |
| 55° | 1459 | 1451  | 1424 | 1408  | 1406 | 1301 |
| 65° | 908  | 904   | 890  | 869   | 864  | 896  |
| 75° | 371  | 372   | 367  | 357   | 349  | 404  |
| 85° | 56   | 55    | 56   | 55    | 52   | 75   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2618.1 | 2618.1 | 2618.1 | 2618.1 | 2618.1 |
| 2.5°  | 2618.8 | 2618.8 | 2617.3 | 2615.0 | 2620.4 |
| 5°    | 2615.0 | 2615.8 | 2614.3 | 2612.0 | 2615.8 |
| 7.5°  | 2609.7 | 2610.5 | 2608.2 | 2605.9 | 2608.9 |
| 10°   | 2601.3 | 2600.6 | 2598.3 | 2596.8 | 2600.6 |
| 12.5° | 2589.2 | 2588.4 | 2586.1 | 2584.6 | 2587.6 |
| 15°   | 2573.9 | 2573.9 | 2570.1 | 2567.8 | 2568.6 |
| 17.5° | 2555.7 | 2555.7 | 2550.3 | 2545.0 | 2546.5 |
| 20°   | 2534.3 | 2533.6 | 2526.0 | 2520.6 | 2519.9 |
| 22.5° | 2507.7 | 2507.7 | 2497.0 | 2490.2 | 2487.9 |
| 25°   | 2475.0 | 2474.2 | 2462.0 | 2452.1 | 2450.6 |
| 27.5° | 2437.7 | 2436.1 | 2421.7 | 2411.8 | 2408.0 |
| 30°   | 2391.2 | 2389.7 | 2374.5 | 2363.8 | 2359.2 |
| 32.5° | 2336.4 | 2338.7 | 2321.2 | 2309.0 | 2304.4 |
| 35°   | 2274.0 | 2274.0 | 2260.3 | 2247.3 | 2239.7 |
| 37.5° | 2202.4 | 2202.4 | 2189.5 | 2176.5 | 2167.4 |
| 40°   | 2121.0 | 2121.7 | 2108.0 | 2092.0 | 2084.4 |
| 42.5° | 2029.6 | 2031.1 | 2012.9 | 1999.9 | 1991.5 |
| 45°   | 1929.9 | 1930.6 | 1910.8 | 1896.4 | 1889.5 |
| 47.5° | 1821.8 | 1820.3 | 1798.2 | 1786.0 | 1779.1 |
| 50°   | 1706.1 | 1703.0 | 1678.6 | 1667.2 | 1661.1 |
| 52.5° | 1585.0 | 1578.9 | 1557.6 | 1540.9 | 1535.5 |
| 55°   | 1459.4 | 1451.0 | 1424.4 | 1407.6 | 1406.1 |
| 57.5° | 1328.5 | 1318.6 | 1296.5 | 1280.5 | 1274.4 |
| 60°   | 1185.3 | 1183.0 | 1164.8 | 1145.7 | 1141.2 |
| 62.5° | 1051.3 | 1044.5 | 1028.5 | 1005.7 | 1003.4 |
| 65°   | 908.2  | 904.4  | 890.0  | 868.6  | 864.1  |
| 67.5° | 760.5  | 764.3  | 752.2  | 733.1  | 727.0  |
| 70°   | 627.3  | 629.6  | 615.9  | 598.4  | 596.1  |
| 72.5° | 493.3  | 497.1  | 485.7  | 474.3  | 472.0  |
| 75°   | 370.7  | 372.3  | 366.9  | 357.0  | 349.4  |
| 77.5° | 263.4  | 268.7  | 262.6  | 255.8  | 249.7  |
| 80°   | 183.5  | 175.1  | 175.9  | 172.8  | 166.0  |
| 82.5° | 110.4  | 106.6  | 105.8  | 102.8  | 99.7   |
| 85°   | 55.6   | 54.8   | 55.6   | 54.8   | 51.8   |
| 87.5° | 18.3   | 19.8   | 20.6   | 20.6   | 19.0   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)