

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: P413263

Luminaire Tested: **24PD-80-PC3-L835**

Issue Date: 9/15/2020



**Test Information**

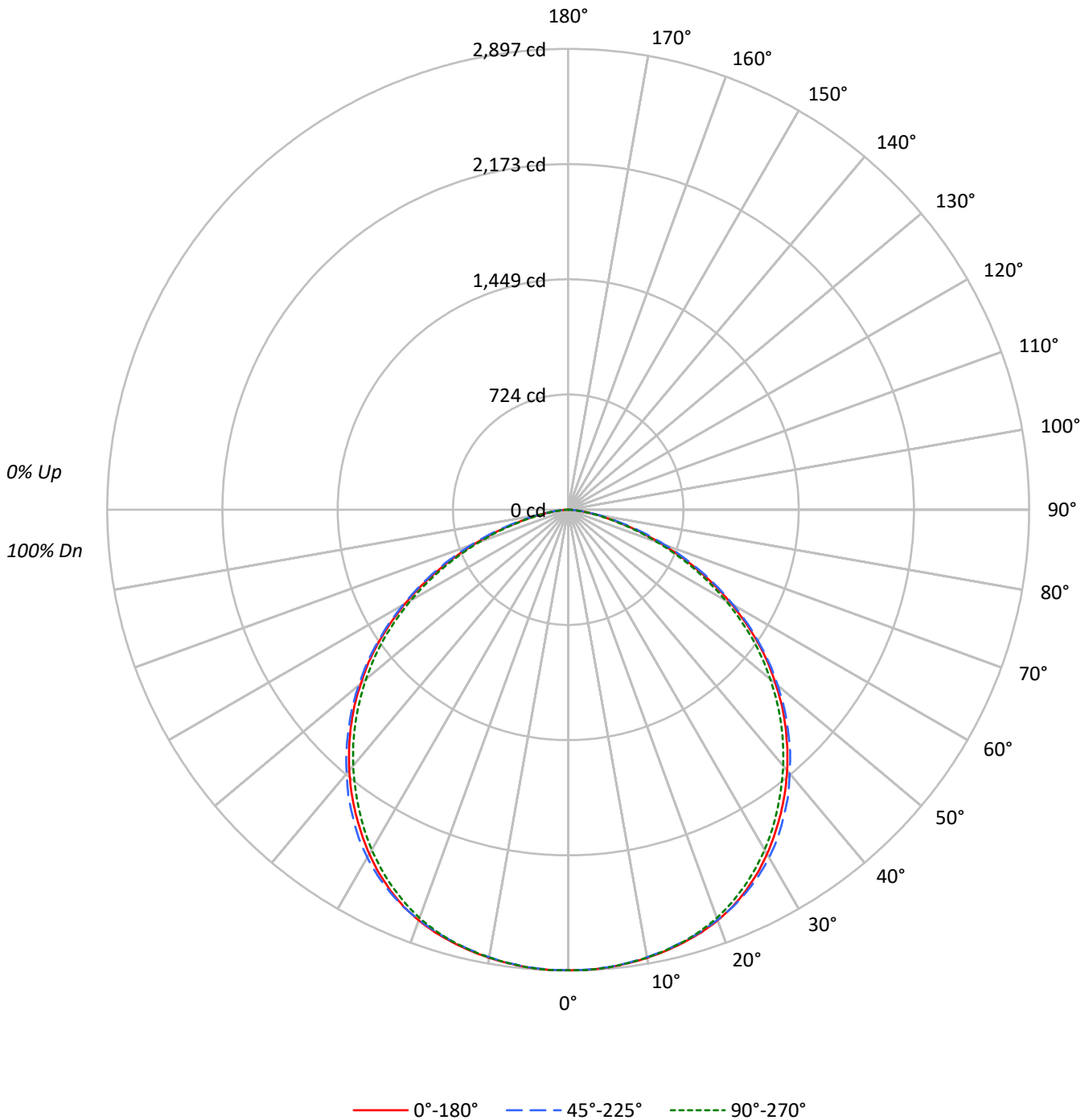
Test Method: LM-79-08  
Report Number: P413263  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-80-PC3-L835  
Description: 8000 LUMEN 2X4 PERCEIVE LED TROFFER WITH PYRAMID PATTERN OPTICS AND 80 CRI, 3500 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7913.0 lumens  
Efficiency: N/A  
Efficacy: 131.2 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 60.3  
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  | 99  | 96  | 93  |  | 95  | 92  | 90  |  | 91  | 89  | 87  | 85  |
| 2   | 100 | 92  | 86  | 80  | 97  | 90  | 84  | 79  | 87  | 82  | 77  |  | 83  | 79  | 75  |  | 80  | 77  | 74  | 72  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  |  | 74  | 69  | 64  |  | 71  | 67  | 63  | 61  |
| 4   | 84  | 72  | 63  | 57  | 81  | 71  | 63  | 57  | 68  | 61  | 56  |  | 66  | 60  | 55  |  | 64  | 59  | 54  | 52  |
| 5   | 77  | 64  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  |  | 59  | 53  | 48  |  | 57  | 52  | 47  | 45  |
| 6   | 71  | 58  | 49  | 43  | 69  | 57  | 49  | 43  | 55  | 48  | 42  |  | 54  | 47  | 42  |  | 52  | 46  | 42  | 40  |
| 7   | 66  | 53  | 44  | 38  | 64  | 52  | 44  | 38  | 50  | 43  | 38  |  | 49  | 42  | 37  |  | 47  | 42  | 37  | 35  |
| 8   | 61  | 48  | 40  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 34  |  | 45  | 38  | 33  |  | 44  | 38  | 33  | 31  |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 36  | 30  | 42  | 35  | 30  |  | 41  | 35  | 30  |  | 40  | 34  | 30  | 28  |
| 10  | 54  | 41  | 33  | 28  | 52  | 40  | 33  | 28  | 39  | 32  | 27  |  | 38  | 32  | 27  |  | 37  | 31  | 27  | 25  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3895 | 3895 | 3895 |
| 5°  | 3900 | 3898 | 3901 |
| 10° | 3908 | 3903 | 3906 |
| 15° | 3921 | 3913 | 3914 |
| 20° | 3934 | 3928 | 3911 |
| 25° | 3923 | 3937 | 3882 |
| 30° | 3883 | 3925 | 3835 |
| 35° | 3826 | 3875 | 3768 |
| 40° | 3759 | 3804 | 3692 |
| 45° | 3675 | 3714 | 3598 |
| 50° | 3560 | 3601 | 3473 |
| 55° | 3414 | 3444 | 3313 |
| 60° | 3187 | 3224 | 3077 |
| 65° | 2872 | 2944 | 2760 |
| 70° | 2439 | 2546 | 2341 |
| 75° | 1889 | 2026 | 1801 |
| 80° | 1404 | 1467 | 1274 |
| 85° | 866  | 928  | 804  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 274.6  | 3.5       |
| 10°-20°   | 793.9  | 10.0      |
| 20°-30°   | 1215.8 | 15.4      |
| 30°-40°   | 1462.7 | 18.5      |
| 40°-50°   | 1491.5 | 18.8      |
| 50°-60°   | 1293.0 | 16.3      |
| 60°-70°   | 896.4  | 11.3      |
| 70°-80°   | 409.4  | 5.2       |
| 80°-90°   | 75.6   | 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°    | 2284.4 | 28.9      |
| 0°-40°    | 3747.0 | 47.4      |
| 0°-60°    | 6531.5 | 82.5      |
| 0°-90°    | 7913.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7913.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2895 | 2895  | 2895 | 2895  | 2895 |      |
| 5°  | 2888 | 2888  | 2886 | 2885  | 2889 | 275  |
| 15° | 2815 | 2814  | 2809 | 2807  | 2810 | 795  |
| 25° | 2642 | 2650  | 2652 | 2629  | 2615 | 1217 |
| 35° | 2330 | 2354  | 2359 | 2329  | 2294 | 1457 |
| 45° | 1931 | 1955  | 1952 | 1925  | 1891 | 1488 |
| 55° | 1456 | 1464  | 1468 | 1432  | 1412 | 1297 |
| 65° | 902  | 921   | 925  | 893   | 867  | 892  |
| 75° | 363  | 383   | 390  | 377   | 346  | 397  |
| 85° | 56   | 58    | 60   | 57    | 52   | 76   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2895.0 | 2895.0 | 2895.0 | 2895.0 | 2895.0 |
| 2.5°  | 2895.0 | 2895.0 | 2893.4 | 2891.8 | 2896.6 |
| 5°    | 2887.8 | 2887.8 | 2886.2 | 2884.6 | 2888.6 |
| 7.5°  | 2876.5 | 2875.7 | 2874.1 | 2872.5 | 2874.9 |
| 10°   | 2860.5 | 2859.7 | 2856.5 | 2855.7 | 2858.9 |
| 12.5° | 2840.4 | 2839.6 | 2834.8 | 2834.8 | 2837.2 |
| 15°   | 2814.8 | 2814.0 | 2809.2 | 2806.8 | 2810.0 |
| 17.5° | 2785.9 | 2785.1 | 2779.5 | 2773.1 | 2774.7 |
| 20°   | 2747.4 | 2747.4 | 2743.4 | 2733.8 | 2731.4 |
| 22.5° | 2700.9 | 2703.3 | 2703.3 | 2684.9 | 2677.7 |
| 25°   | 2642.4 | 2649.6 | 2652.0 | 2628.7 | 2615.1 |
| 27.5° | 2575.8 | 2587.0 | 2593.5 | 2563.8 | 2546.1 |
| 30°   | 2499.6 | 2518.1 | 2526.1 | 2494.0 | 2468.4 |
| 32.5° | 2416.2 | 2439.5 | 2449.1 | 2417.8 | 2384.9 |
| 35°   | 2329.6 | 2354.5 | 2359.3 | 2328.8 | 2294.3 |
| 37.5° | 2237.4 | 2263.1 | 2269.5 | 2242.2 | 2199.7 |
| 40°   | 2140.4 | 2166.0 | 2166.0 | 2143.6 | 2101.9 |
| 42.5° | 2037.7 | 2065.0 | 2064.2 | 2036.9 | 1999.2 |
| 45°   | 1931.1 | 1955.1 | 1951.9 | 1925.4 | 1891.0 |
| 47.5° | 1821.2 | 1836.4 | 1840.4 | 1809.2 | 1776.3 |
| 50°   | 1700.9 | 1716.1 | 1720.1 | 1684.9 | 1659.2 |
| 52.5° | 1582.2 | 1591.8 | 1597.5 | 1556.6 | 1538.1 |
| 55°   | 1455.5 | 1464.3 | 1468.3 | 1432.3 | 1412.2 |
| 57.5° | 1321.6 | 1332.8 | 1337.6 | 1301.5 | 1279.1 |
| 60°   | 1184.5 | 1196.5 | 1198.1 | 1164.4 | 1143.6 |
| 62.5° | 1044.9 | 1061.0 | 1064.2 | 1030.5 | 1005.6 |
| 65°   | 902.2  | 921.4  | 924.6  | 893.4  | 866.9  |
| 67.5° | 759.4  | 785.1  | 785.9  | 760.2  | 729.0  |
| 70°   | 619.9  | 648.0  | 647.2  | 625.5  | 595.0  |
| 72.5° | 486.8  | 512.4  | 518.0  | 498.0  | 468.3  |
| 75°   | 363.3  | 383.3  | 389.7  | 376.9  | 346.4  |
| 77.5° | 258.2  | 276.7  | 282.3  | 270.3  | 247.8  |
| 80°   | 181.2  | 182.0  | 189.3  | 179.6  | 164.4  |
| 82.5° | 112.3  | 110.7  | 113.1  | 109.1  | 100.2  |
| 85°   | 56.1   | 57.7   | 60.1   | 56.9   | 52.1   |
| 87.5° | 19.2   | 20.0   | 21.7   | 21.7   | 19.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)