

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: P413262

Luminaire Tested: **24PD-80-PC3-L830**

Issue Date: 9/15/2020



Test Information

Test Method: LM-79-08
Report Number: P413262
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-L830
Description: 8000 LUMEN 2X4 PERCEIVE LED TROFFER WITH PYRAMID PATTERN OPTICS AND 80 CRI, 3000 CCT LEDS
Light Source: -
Ballast/Driver: -

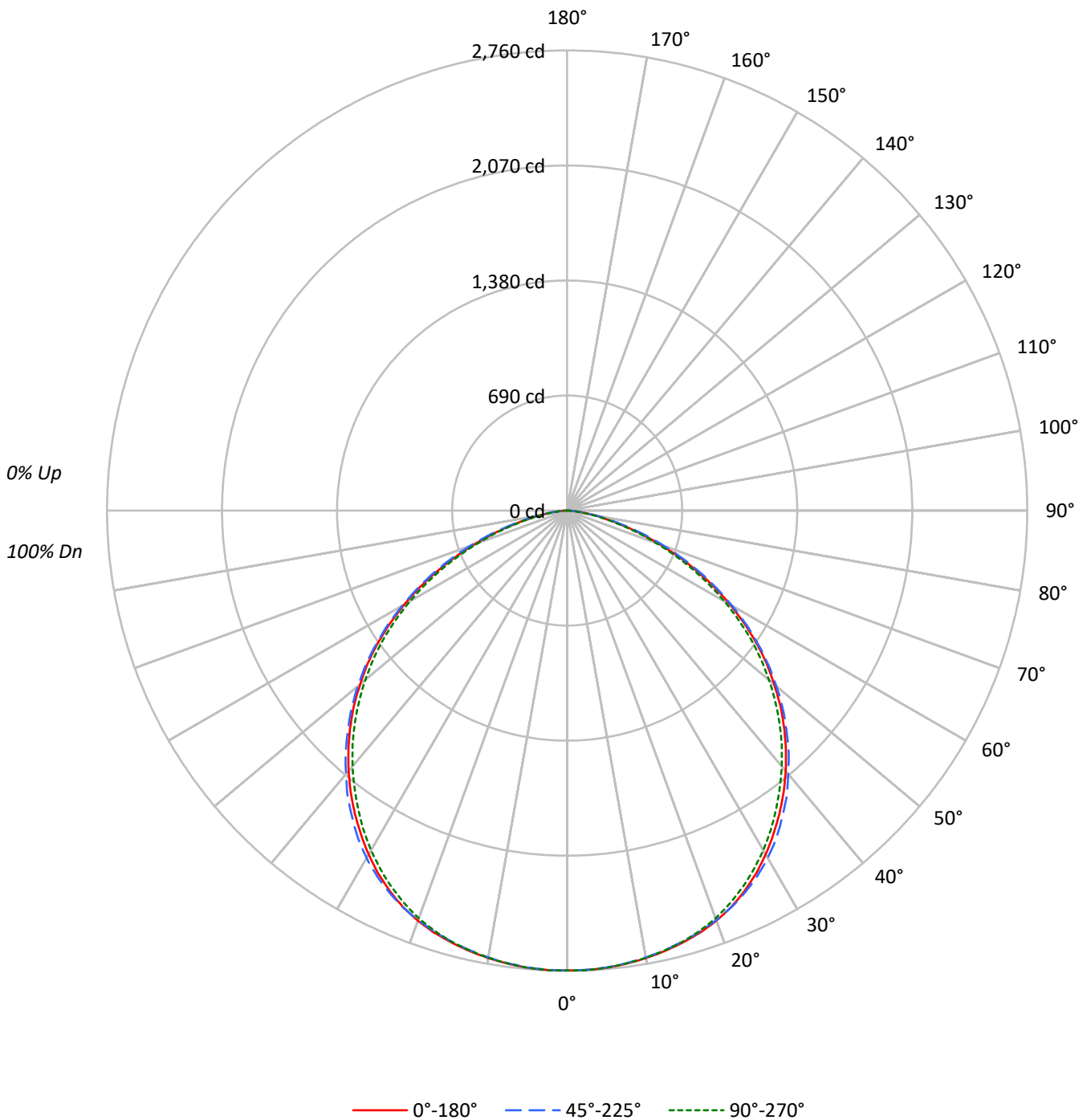
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7539.0 lumens
Efficiency: N/A
Efficacy: 125.0 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° | 3711 | 3711 | 3711 |
| 5° | 3716 | 3714 | 3717 |
| 10° | 3723 | 3718 | 3721 |
| 15° | 3735 | 3728 | 3729 |
| 20° | 3748 | 3742 | 3726 |
| 25° | 3737 | 3751 | 3699 |
| 30° | 3700 | 3739 | 3654 |
| 35° | 3646 | 3692 | 3590 |
| 40° | 3582 | 3625 | 3517 |
| 45° | 3501 | 3539 | 3428 |
| 50° | 3392 | 3430 | 3309 |
| 55° | 3253 | 3282 | 3156 |
| 60° | 3037 | 3072 | 2932 |
| 65° | 2736 | 2805 | 2629 |
| 70° | 2323 | 2426 | 2230 |
| 75° | 1799 | 1930 | 1716 |
| 80° | 1338 | 1397 | 1213 |
| 85° | 826 | 885 | 767 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 261.6 | 3.5 |
| 10°-20° | 756.4 | 10.0 |
| 20°-30° | 1158.4 | 15.4 |
| 30°-40° | 1393.5 | 18.5 |
| 40°-50° | 1421.0 | 18.8 |
| 50°-60° | 1231.9 | 16.3 |
| 60°-70° | 854.1 | 11.3 |
| 70°-80° | 390.1 | 5.2 |
| 80°-90° | 72.0 | 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° | 2176.4 | 28.9 |
| 0°-40° | 3569.9 | 47.4 |
| 0°-60° | 6222.8 | 82.5 |
| 0°-90° | 7539.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 7539.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2758 | 2758 | 2758 | 2758 | 2758 | |
| 5° | 2751 | 2751 | 2750 | 2748 | 2752 | 262 |
| 15° | 2682 | 2681 | 2676 | 2674 | 2677 | 758 |
| 25° | 2518 | 2524 | 2527 | 2504 | 2492 | 1159 |
| 35° | 2220 | 2243 | 2248 | 2219 | 2186 | 1388 |
| 45° | 1840 | 1863 | 1860 | 1834 | 1802 | 1418 |
| 55° | 1387 | 1395 | 1399 | 1365 | 1346 | 1236 |
| 65° | 860 | 878 | 881 | 851 | 826 | 850 |
| 75° | 346 | 365 | 371 | 359 | 330 | 379 |
| 85° | 54 | 55 | 57 | 54 | 50 | 72 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P413262

CATALOG NUMBER: 24PD-80-PC3-L830

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2758.2 | 2758.2 | 2758.2 | 2758.2 | 2758.2 |
| 2.5° | 2758.2 | 2758.2 | 2756.6 | 2755.1 | 2759.7 |
| 5° | 2751.3 | 2751.3 | 2749.7 | 2748.2 | 2752.0 |
| 7.5° | 2740.6 | 2739.8 | 2738.3 | 2736.8 | 2739.1 |
| 10° | 2725.3 | 2724.5 | 2721.5 | 2720.7 | 2723.8 |
| 12.5° | 2706.2 | 2705.4 | 2700.8 | 2700.8 | 2703.1 |
| 15° | 2681.7 | 2681.0 | 2676.4 | 2674.1 | 2677.2 |
| 17.5° | 2654.2 | 2653.5 | 2648.1 | 2642.0 | 2643.5 |
| 20° | 2617.6 | 2617.6 | 2613.7 | 2604.6 | 2602.3 |
| 22.5° | 2573.3 | 2575.5 | 2575.5 | 2558.0 | 2551.1 |
| 25° | 2517.5 | 2524.4 | 2526.6 | 2504.5 | 2491.5 |
| 27.5° | 2454.1 | 2464.8 | 2470.9 | 2442.6 | 2425.8 |
| 30° | 2381.5 | 2399.1 | 2406.7 | 2376.1 | 2351.7 |
| 32.5° | 2302.0 | 2324.2 | 2333.4 | 2303.6 | 2272.2 |
| 35° | 2219.5 | 2243.2 | 2247.8 | 2218.7 | 2185.9 |
| 37.5° | 2131.6 | 2156.1 | 2162.2 | 2136.2 | 2095.7 |
| 40° | 2039.2 | 2063.6 | 2063.6 | 2042.3 | 2002.5 |
| 42.5° | 1941.4 | 1967.4 | 1966.6 | 1940.6 | 1904.7 |
| 45° | 1839.8 | 1862.7 | 1859.7 | 1834.4 | 1801.6 |
| 47.5° | 1735.1 | 1749.6 | 1753.5 | 1723.7 | 1692.3 |
| 50° | 1620.5 | 1635.0 | 1638.8 | 1605.2 | 1580.8 |
| 52.5° | 1507.4 | 1516.6 | 1521.9 | 1483.0 | 1465.4 |
| 55° | 1386.7 | 1395.1 | 1398.9 | 1364.6 | 1345.5 |
| 57.5° | 1259.1 | 1269.8 | 1274.4 | 1240.0 | 1218.6 |
| 60° | 1128.5 | 1139.9 | 1141.5 | 1109.4 | 1089.5 |
| 62.5° | 995.5 | 1010.8 | 1013.9 | 981.8 | 958.1 |
| 65° | 859.5 | 877.9 | 880.9 | 851.1 | 825.9 |
| 67.5° | 723.5 | 748.0 | 748.8 | 724.3 | 694.5 |
| 70° | 590.6 | 617.3 | 616.6 | 595.9 | 566.9 |
| 72.5° | 463.8 | 488.2 | 493.6 | 474.5 | 446.2 |
| 75° | 346.1 | 365.2 | 371.3 | 359.1 | 330.1 |
| 77.5° | 246.0 | 263.6 | 268.9 | 257.5 | 236.1 |
| 80° | 172.7 | 173.4 | 180.3 | 171.1 | 156.6 |
| 82.5° | 107.0 | 105.4 | 107.7 | 103.9 | 95.5 |
| 85° | 53.5 | 55.0 | 57.3 | 54.2 | 49.7 |
| 87.5° | 18.3 | 19.1 | 20.6 | 20.6 | 18.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)