

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: P412464

Luminaire Tested: **22PD-80-PB1-L850**

Issue Date: 9/15/2020



Test Information

Test Method: LM-79-08
Report Number: P412464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-14)
Test Lab: INNOVATION CENTER
Issue Date: 9/15/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22PD-80-PB1-L850
Description: 8000 LUMEN 2X2 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 80 CRI, 5000 CCT LEDS
Light Source: -
Ballast/Driver: -

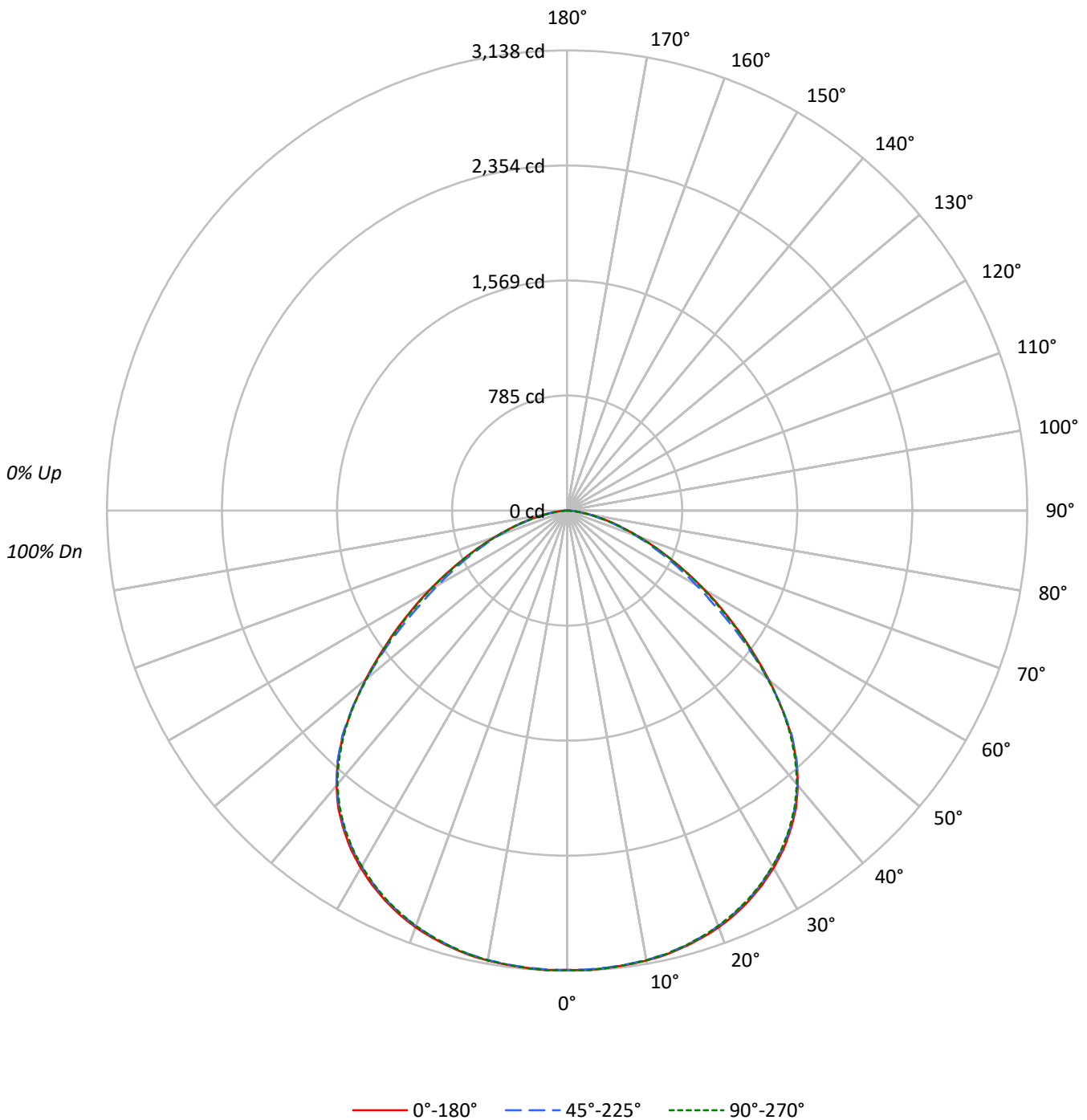
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8225.0 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.33 / 1.32 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 72.6
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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CATALOG NUMBER: 22PD-80-PB1-L850

Luminous Intensity Polar Plot





TEST NUMBER: P412464

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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 | 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 | | | | | 100 | | | |
| 1 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | | | | | 86 | | | | |
| 2 | 101 | 93 | 87 | 82 | 98 | 91 | 86 | 81 | 88 | 83 | 79 | 85 | 81 | 77 | 82 | 78 | 76 | | | | | 73 | | | | |
| 3 | 92 | 83 | 75 | 69 | 90 | 81 | 74 | 68 | 78 | 72 | 67 | 76 | 70 | 66 | 73 | 69 | 65 | | | | | 63 | | | | |
| 4 | 85 | 74 | 65 | 59 | 83 | 72 | 65 | 59 | 70 | 63 | 58 | 68 | 62 | 57 | 66 | 61 | 56 | | | | | 54 | | | | |
| 5 | 78 | 66 | 58 | 51 | 76 | 65 | 57 | 51 | 63 | 56 | 50 | 61 | 55 | 50 | 59 | 54 | 49 | | | | | 47 | | | | |
| 6 | 72 | 60 | 51 | 45 | 71 | 59 | 51 | 45 | 57 | 50 | 44 | 55 | 49 | 44 | 54 | 48 | 44 | | | | | 42 | | | | |
| 7 | 67 | 54 | 46 | 40 | 66 | 53 | 45 | 40 | 52 | 45 | 39 | 51 | 44 | 39 | 49 | 43 | 39 | | | | | 37 | | | | |
| 8 | 63 | 50 | 41 | 36 | 61 | 49 | 41 | 36 | 48 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | | | | | 33 | | | | |
| 9 | 59 | 46 | 38 | 32 | 57 | 45 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 32 | | | | | 30 | | | | |
| 10 | 55 | 42 | 34 | 29 | 54 | 41 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 29 | | | | | 27 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8431 | 8431 | 8431 |
| 5° | 8458 | 8450 | 8460 |
| 10° | 8513 | 8502 | 8508 |
| 15° | 8582 | 8569 | 8569 |
| 20° | 8661 | 8636 | 8630 |
| 25° | 8715 | 8690 | 8681 |
| 30° | 8744 | 8708 | 8702 |
| 35° | 8726 | 8701 | 8685 |
| 40° | 8596 | 8586 | 8559 |
| 45° | 8217 | 8243 | 8181 |
| 50° | 7523 | 7482 | 7474 |
| 55° | 6685 | 6449 | 6640 |
| 60° | 5829 | 5475 | 5793 |
| 65° | 4941 | 4676 | 4916 |
| 70° | 4085 | 3917 | 4047 |
| 75° | 3303 | 3092 | 3173 |
| 80° | 2386 | 2312 | 2297 |
| 85° | 1556 | 1556 | 1494 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 298.1 | 3.6 |
| 10°-20° | 869.4 | 10.6 |
| 20°-30° | 1349.1 | 16.4 |
| 30°-40° | 1654.3 | 20.1 |
| 40°-50° | 1653.7 | 20.1 |
| 50°-60° | 1252.7 | 15.2 |
| 60°-70° | 751.3 | 9.1 |
| 70°-80° | 330.8 | 4.0 |
| 80°-90° | 65.6 | 0.8 |
| 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° | 2516.5 | 30.6 |
| 0°-40° | 4170.9 | 50.7 |
| 0°-60° | 7077.3 | 86.0 |
| 0°-90° | 8225.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8225.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 3133 | 3133 | 3133 | 3133 | 3133 | |
| 5° | 3131 | 3127 | 3128 | 3127 | 3132 | 298 |
| 15° | 3081 | 3078 | 3076 | 3074 | 3076 | 871 |
| 25° | 2935 | 2930 | 2927 | 2922 | 2924 | 1353 |
| 35° | 2656 | 2655 | 2648 | 2647 | 2644 | 1659 |
| 45° | 2159 | 2162 | 2166 | 2160 | 2150 | 1653 |
| 55° | 1425 | 1394 | 1375 | 1393 | 1415 | 1277 |
| 65° | 776 | 749 | 734 | 747 | 772 | 776 |
| 75° | 318 | 311 | 297 | 302 | 305 | 339 |
| 85° | 50 | 52 | 50 | 48 | 48 | 67 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P412464

CATALOG NUMBER: 22PD-80-PB1-L850

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 3132.9 | 3132.9 | 3132.9 | 3132.9 | 3132.9 |
| 2.5° | 3135.8 | 3131.0 | 3131.9 | 3131.9 | 3137.7 |
| 5° | 3131.0 | 3127.1 | 3128.1 | 3127.1 | 3131.9 |
| 7.5° | 3124.2 | 3120.3 | 3121.3 | 3120.3 | 3123.2 |
| 10° | 3115.5 | 3111.6 | 3111.6 | 3109.6 | 3113.5 |
| 12.5° | 3103.8 | 3099.0 | 3097.1 | 3096.1 | 3099.0 |
| 15° | 3080.6 | 3077.7 | 3075.7 | 3073.8 | 3075.7 |
| 17.5° | 3055.4 | 3050.6 | 3048.6 | 3044.7 | 3048.6 |
| 20° | 3024.4 | 3017.6 | 3015.7 | 3012.8 | 3013.7 |
| 22.5° | 2983.7 | 2977.9 | 2975.0 | 2970.1 | 2972.1 |
| 25° | 2935.3 | 2929.5 | 2926.6 | 2921.7 | 2923.6 |
| 27.5° | 2879.1 | 2875.2 | 2868.4 | 2864.6 | 2865.5 |
| 30° | 2814.2 | 2810.3 | 2802.6 | 2800.6 | 2800.6 |
| 32.5° | 2742.5 | 2737.6 | 2730.9 | 2728.9 | 2728.0 |
| 35° | 2656.3 | 2655.3 | 2648.5 | 2646.6 | 2643.7 |
| 37.5° | 2562.3 | 2560.4 | 2552.6 | 2550.7 | 2547.8 |
| 40° | 2447.0 | 2445.1 | 2444.1 | 2440.2 | 2436.4 |
| 42.5° | 2313.3 | 2316.2 | 2318.2 | 2310.4 | 2302.7 |
| 45° | 2159.3 | 2162.2 | 2166.1 | 2160.3 | 2149.6 |
| 47.5° | 1979.1 | 1990.8 | 1984.9 | 1988.8 | 1978.2 |
| 50° | 1797.0 | 1797.0 | 1787.3 | 1791.2 | 1785.4 |
| 52.5° | 1606.2 | 1590.7 | 1579.0 | 1586.8 | 1594.5 |
| 55° | 1425.0 | 1394.0 | 1374.6 | 1393.0 | 1415.3 |
| 57.5° | 1251.6 | 1214.8 | 1179.0 | 1208.0 | 1235.1 |
| 60° | 1083.0 | 1040.4 | 1017.2 | 1038.5 | 1076.3 |
| 62.5° | 923.2 | 892.2 | 869.0 | 885.4 | 917.4 |
| 65° | 776.0 | 748.8 | 734.3 | 746.9 | 772.1 |
| 67.5° | 641.3 | 622.9 | 608.4 | 619.0 | 638.4 |
| 70° | 519.2 | 514.4 | 497.9 | 502.8 | 514.4 |
| 72.5° | 407.8 | 406.9 | 392.3 | 396.2 | 403.0 |
| 75° | 317.7 | 311.0 | 297.4 | 302.2 | 305.2 |
| 77.5° | 224.7 | 227.7 | 215.1 | 218.0 | 218.0 |
| 80° | 154.0 | 158.9 | 149.2 | 147.2 | 148.2 |
| 82.5° | 97.8 | 97.8 | 96.9 | 95.9 | 93.0 |
| 85° | 50.4 | 52.3 | 50.4 | 48.4 | 48.4 |
| 87.5° | 19.4 | 19.4 | 19.4 | 18.4 | 17.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)