

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: P412907

Luminaire Tested: **24PD-70-PP3-L930**

Issue Date: 9/15/2020



Test Information

Test Method: LM-79-08
Report Number: P412907
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-70-PP3-L930
Description: 7000 LUMEN 2X4 PERCEIVE LED TROFFER WITH PRISM PATTERN OPTICS AND 90 CRI, 3000 CCT LEDS
Light Source: -
Ballast/Driver: -

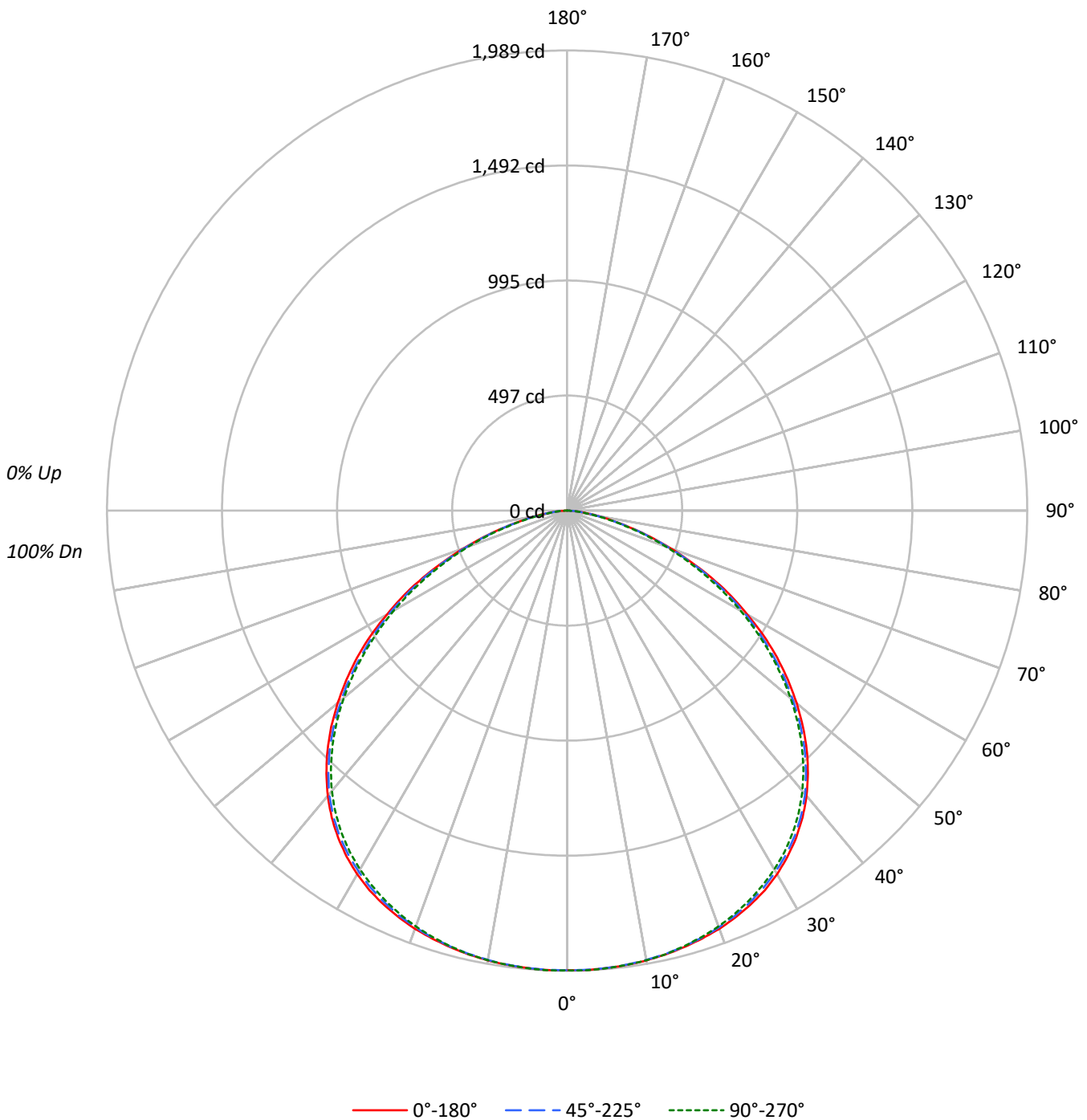
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5782.0 lumens
Efficiency: N/A
Efficacy: 110.6 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): 52.3
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 | 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° | 2674 | 2674 | 2674 |
| 5° | 2681 | 2680 | 2682 |
| 10° | 2698 | 2694 | 2697 |
| 15° | 2721 | 2717 | 2716 |
| 20° | 2754 | 2745 | 2739 |
| 25° | 2789 | 2774 | 2761 |
| 30° | 2820 | 2800 | 2782 |
| 35° | 2835 | 2818 | 2792 |
| 40° | 2827 | 2810 | 2779 |
| 45° | 2787 | 2760 | 2729 |
| 50° | 2710 | 2667 | 2639 |
| 55° | 2598 | 2536 | 2503 |
| 60° | 2421 | 2379 | 2331 |
| 65° | 2195 | 2151 | 2088 |
| 70° | 1873 | 1839 | 1780 |
| 75° | 1463 | 1448 | 1379 |
| 80° | 1079 | 1034 | 976 |
| 85° | 651 | 651 | 607 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 189.0 | 3.3 |
| 10°-20° | 551.7 | 9.5 |
| 20°-30° | 862.3 | 14.9 |
| 30°-40° | 1071.6 | 18.5 |
| 40°-50° | 1116.6 | 19.3 |
| 50°-60° | 968.9 | 16.8 |
| 60°-70° | 666.2 | 11.5 |
| 70°-80° | 300.6 | 5.2 |
| 80°-90° | 55.1 | 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° | 1603.0 | 27.7 |
| 0°-40° | 2674.6 | 46.3 |
| 0°-60° | 4760.1 | 82.3 |
| 0°-90° | 5782.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5782.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1987 | 1987 | 1987 | 1987 | 1987 | |
| 5° | 1985 | 1985 | 1984 | 1982 | 1985 | 189 |
| 15° | 1954 | 1954 | 1951 | 1949 | 1950 | 553 |
| 25° | 1878 | 1878 | 1869 | 1861 | 1860 | 867 |
| 35° | 1726 | 1726 | 1716 | 1706 | 1700 | 1078 |
| 45° | 1465 | 1465 | 1450 | 1439 | 1434 | 1127 |
| 55° | 1108 | 1101 | 1081 | 1068 | 1067 | 987 |
| 65° | 689 | 686 | 676 | 659 | 656 | 680 |
| 75° | 281 | 283 | 278 | 271 | 265 | 306 |
| 85° | 42 | 42 | 42 | 42 | 39 | 57 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P412907

CATALOG NUMBER: 24PD-70-PP3-L930

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1987.1 | 1987.1 | 1987.1 | 1987.1 | 1987.1 |
| 2.5° | 1987.7 | 1987.7 | 1986.5 | 1984.8 | 1988.8 |
| 5° | 1984.8 | 1985.4 | 1984.2 | 1982.5 | 1985.4 |
| 7.5° | 1980.7 | 1981.3 | 1979.6 | 1977.9 | 1980.2 |
| 10° | 1974.4 | 1973.8 | 1972.1 | 1970.9 | 1973.8 |
| 12.5° | 1965.1 | 1964.6 | 1962.8 | 1961.7 | 1964.0 |
| 15° | 1953.6 | 1953.6 | 1950.7 | 1949.0 | 1949.5 |
| 17.5° | 1939.7 | 1939.7 | 1935.7 | 1931.6 | 1932.8 |
| 20° | 1923.5 | 1923.0 | 1917.2 | 1913.1 | 1912.6 |
| 22.5° | 1903.3 | 1903.3 | 1895.2 | 1890.0 | 1888.3 |
| 25° | 1878.5 | 1877.9 | 1868.7 | 1861.1 | 1860.0 |
| 27.5° | 1850.2 | 1849.0 | 1838.0 | 1830.5 | 1827.6 |
| 30° | 1814.9 | 1813.8 | 1802.2 | 1794.1 | 1790.6 |
| 32.5° | 1773.3 | 1775.0 | 1761.8 | 1752.5 | 1749.0 |
| 35° | 1725.9 | 1725.9 | 1715.5 | 1705.7 | 1699.9 |
| 37.5° | 1671.6 | 1671.6 | 1661.8 | 1652.0 | 1645.0 |
| 40° | 1609.8 | 1610.4 | 1600.0 | 1587.8 | 1582.1 |
| 42.5° | 1540.5 | 1541.6 | 1527.7 | 1517.9 | 1511.6 |
| 45° | 1464.8 | 1465.3 | 1450.3 | 1439.3 | 1434.1 |
| 47.5° | 1382.7 | 1381.6 | 1364.8 | 1355.6 | 1350.4 |
| 50° | 1294.9 | 1292.6 | 1274.1 | 1265.4 | 1260.8 |
| 52.5° | 1203.0 | 1198.4 | 1182.2 | 1169.5 | 1165.5 |
| 55° | 1107.7 | 1101.3 | 1081.1 | 1068.4 | 1067.2 |
| 57.5° | 1008.3 | 1000.8 | 984.0 | 971.9 | 967.3 |
| 60° | 899.7 | 897.9 | 884.1 | 869.6 | 866.1 |
| 62.5° | 798.0 | 792.8 | 780.6 | 763.3 | 761.6 |
| 65° | 689.3 | 686.4 | 675.5 | 659.3 | 655.8 |
| 67.5° | 577.2 | 580.1 | 570.9 | 556.4 | 551.8 |
| 70° | 476.1 | 477.9 | 467.5 | 454.2 | 452.4 |
| 72.5° | 374.4 | 377.3 | 368.6 | 360.0 | 358.2 |
| 75° | 281.4 | 282.6 | 278.5 | 271.0 | 265.2 |
| 77.5° | 199.9 | 204.0 | 199.3 | 194.1 | 189.5 |
| 80° | 139.3 | 132.9 | 133.5 | 131.2 | 126.0 |
| 82.5° | 83.8 | 80.9 | 80.3 | 78.0 | 75.7 |
| 85° | 42.2 | 41.6 | 42.2 | 41.6 | 39.3 |
| 87.5° | 13.9 | 15.0 | 15.6 | 15.6 | 14.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)