

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: P412566

Luminaire Tested: **24PD-70-PB1-L935**

Issue Date: 9/15/2020



Test Information

Test Method: LM-79-08
Report Number: P412566
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-45)
Test Lab: INNOVATION CENTER
Issue Date: 9/15/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24PD-70-PB1-L935
Description: 7000 LUMEN 2X4 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 90 CRI, 3500 CCT LEDS
Light Source: -
Ballast/Driver: -

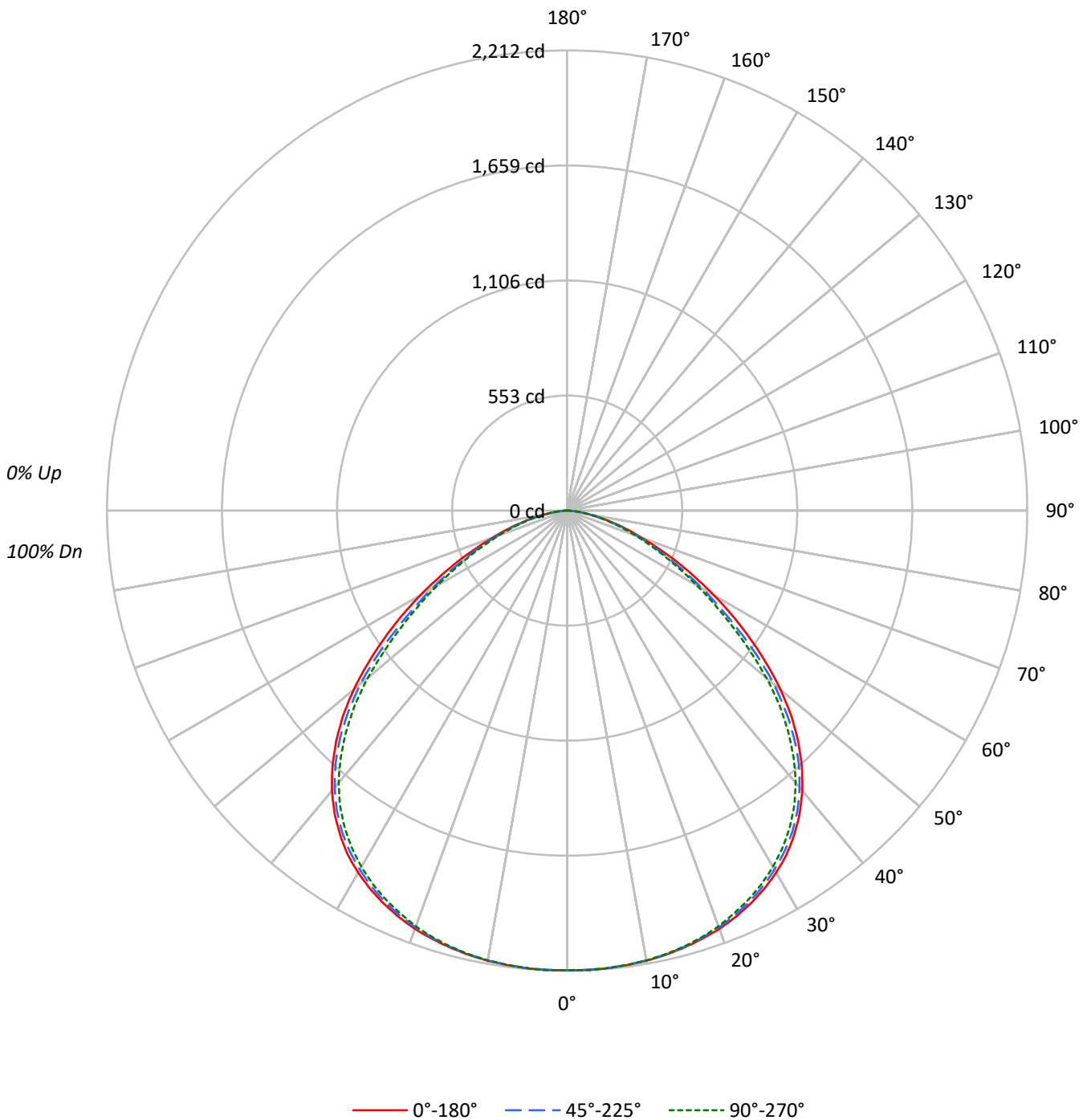
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5878.0 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.32 / 1.41
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 | 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 | 75 | 73 |
| 3 | 92 | 83 | 75 | 69 | 90 | 81 | 74 | 68 | 78 | 72 | 67 | 75 | 70 | 66 | 73 | 69 | 65 | 63 |
| 4 | 85 | 74 | 65 | 59 | 83 | 72 | 65 | 59 | 70 | 63 | 58 | 68 | 62 | 57 | 65 | 60 | 56 | 54 |
| 5 | 78 | 66 | 57 | 51 | 76 | 65 | 57 | 51 | 63 | 56 | 50 | 61 | 55 | 50 | 59 | 54 | 49 | 47 |
| 6 | 72 | 60 | 51 | 45 | 70 | 59 | 51 | 45 | 57 | 50 | 44 | 55 | 49 | 44 | 54 | 48 | 43 | 41 |
| 7 | 67 | 54 | 46 | 40 | 65 | 53 | 45 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 49 | 43 | 39 | 37 |
| 8 | 63 | 49 | 41 | 35 | 61 | 49 | 41 | 35 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 33 |
| 9 | 58 | 45 | 37 | 32 | 57 | 45 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 31 | 30 |
| 10 | 55 | 42 | 34 | 29 | 53 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 29 | 39 | 33 | 29 | 27 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2972 | 2972 | 2972 |
| 5° | 2982 | 2982 | 2982 |
| 10° | 3002 | 2999 | 3000 |
| 15° | 3029 | 3025 | 3022 |
| 20° | 3063 | 3053 | 3045 |
| 25° | 3095 | 3080 | 3062 |
| 30° | 3122 | 3096 | 3073 |
| 35° | 3125 | 3098 | 3060 |
| 40° | 3089 | 3053 | 3002 |
| 45° | 2989 | 2935 | 2859 |
| 50° | 2803 | 2716 | 2617 |
| 55° | 2519 | 2369 | 2272 |
| 60° | 2193 | 2018 | 1941 |
| 65° | 1845 | 1707 | 1633 |
| 70° | 1504 | 1428 | 1371 |
| 75° | 1206 | 1163 | 1114 |
| 80° | 925 | 853 | 830 |
| 85° | 579 | 560 | 560 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 210.3 | 3.6 |
| 10°-20° | 613.9 | 10.4 |
| 20°-30° | 956.4 | 16.3 |
| 30°-40° | 1176.5 | 20.0 |
| 40°-50° | 1181.7 | 20.1 |
| 50°-60° | 910.8 | 15.5 |
| 60°-70° | 540.7 | 9.2 |
| 70°-80° | 240.7 | 4.1 |
| 80°-90° | 47.0 | 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° | 1780.5 | 30.3 |
| 0°-40° | 2957.0 | 50.3 |
| 0°-60° | 5049.6 | 85.9 |
| 0°-90° | 5878.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5878.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2209 | 2209 | 2209 | 2209 | 2209 | |
| 5° | 2208 | 2208 | 2208 | 2206 | 2208 | 210 |
| 15° | 2174 | 2174 | 2172 | 2168 | 2170 | 615 |
| 25° | 2085 | 2084 | 2074 | 2065 | 2063 | 962 |
| 35° | 1903 | 1900 | 1886 | 1871 | 1863 | 1188 |
| 45° | 1571 | 1567 | 1542 | 1516 | 1502 | 1206 |
| 55° | 1074 | 1053 | 1010 | 980 | 968 | 960 |
| 65° | 580 | 554 | 536 | 516 | 513 | 579 |
| 75° | 232 | 227 | 224 | 216 | 214 | 251 |
| 85° | 38 | 36 | 36 | 34 | 36 | 50 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P412566

CATALOG NUMBER: 24PD-70-PB1-L935

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2209.0 | 2209.0 | 2209.0 | 2209.0 | 2209.0 |
| 2.5° | 2210.2 | 2209.6 | 2209.6 | 2207.3 | 2212.0 |
| 5° | 2207.9 | 2208.4 | 2207.9 | 2205.5 | 2207.9 |
| 7.5° | 2203.2 | 2203.8 | 2202.6 | 2200.2 | 2202.6 |
| 10° | 2197.3 | 2197.3 | 2195.0 | 2193.8 | 2195.6 |
| 12.5° | 2187.4 | 2187.4 | 2185.0 | 2183.3 | 2185.0 |
| 15° | 2174.5 | 2174.5 | 2171.6 | 2168.0 | 2169.8 |
| 17.5° | 2158.7 | 2158.7 | 2154.0 | 2149.3 | 2150.5 |
| 20° | 2139.4 | 2138.8 | 2132.3 | 2125.9 | 2126.5 |
| 22.5° | 2114.8 | 2114.2 | 2106.0 | 2098.4 | 2096.0 |
| 25° | 2084.9 | 2084.3 | 2074.4 | 2065.0 | 2062.7 |
| 27.5° | 2050.4 | 2048.0 | 2036.9 | 2026.4 | 2024.0 |
| 30° | 2009.4 | 2007.6 | 1993.0 | 1982.4 | 1977.8 |
| 32.5° | 1962.0 | 1957.3 | 1943.8 | 1930.9 | 1924.5 |
| 35° | 1902.8 | 1899.9 | 1886.4 | 1870.6 | 1863.0 |
| 37.5° | 1836.1 | 1833.1 | 1818.5 | 1800.9 | 1792.2 |
| 40° | 1758.8 | 1756.4 | 1738.3 | 1720.1 | 1709.0 |
| 42.5° | 1669.8 | 1668.0 | 1648.7 | 1623.5 | 1611.8 |
| 45° | 1570.9 | 1566.8 | 1542.2 | 1516.4 | 1502.3 |
| 47.5° | 1460.8 | 1453.8 | 1423.9 | 1399.3 | 1384.1 |
| 50° | 1339.0 | 1329.6 | 1297.4 | 1265.8 | 1250.0 |
| 52.5° | 1207.3 | 1190.9 | 1157.5 | 1121.2 | 1106.0 |
| 55° | 1073.8 | 1053.3 | 1010.0 | 979.5 | 968.4 |
| 57.5° | 943.2 | 913.4 | 872.4 | 850.7 | 839.6 |
| 60° | 815.0 | 782.2 | 750.0 | 728.9 | 721.3 |
| 62.5° | 692.6 | 665.1 | 637.6 | 616.5 | 611.8 |
| 65° | 579.6 | 554.5 | 536.3 | 515.8 | 512.9 |
| 67.5° | 474.2 | 462.5 | 446.1 | 428.6 | 426.2 |
| 70° | 382.3 | 377.6 | 363.0 | 352.5 | 348.4 |
| 72.5° | 305.0 | 300.4 | 289.8 | 282.2 | 281.0 |
| 75° | 231.9 | 227.2 | 223.7 | 216.0 | 214.3 |
| 77.5° | 165.1 | 165.7 | 162.8 | 158.7 | 159.8 |
| 80° | 119.4 | 112.4 | 110.1 | 107.7 | 107.1 |
| 82.5° | 73.2 | 69.1 | 67.3 | 66.7 | 67.9 |
| 85° | 37.5 | 35.7 | 36.3 | 34.5 | 36.3 |
| 87.5° | 12.9 | 12.9 | 13.5 | 12.9 | 14.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)