

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: P412568

Luminaire Tested: **24PD-70-PB1-L950**

Issue Date: 9/15/2020



Test Information

Test Method: LM-79-08
Report Number: P412568
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-L950
Description: 7000 LUMEN 2X4 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 90 CRI, 5000 CCT LEDS
Light Source: -
Ballast/Driver: -

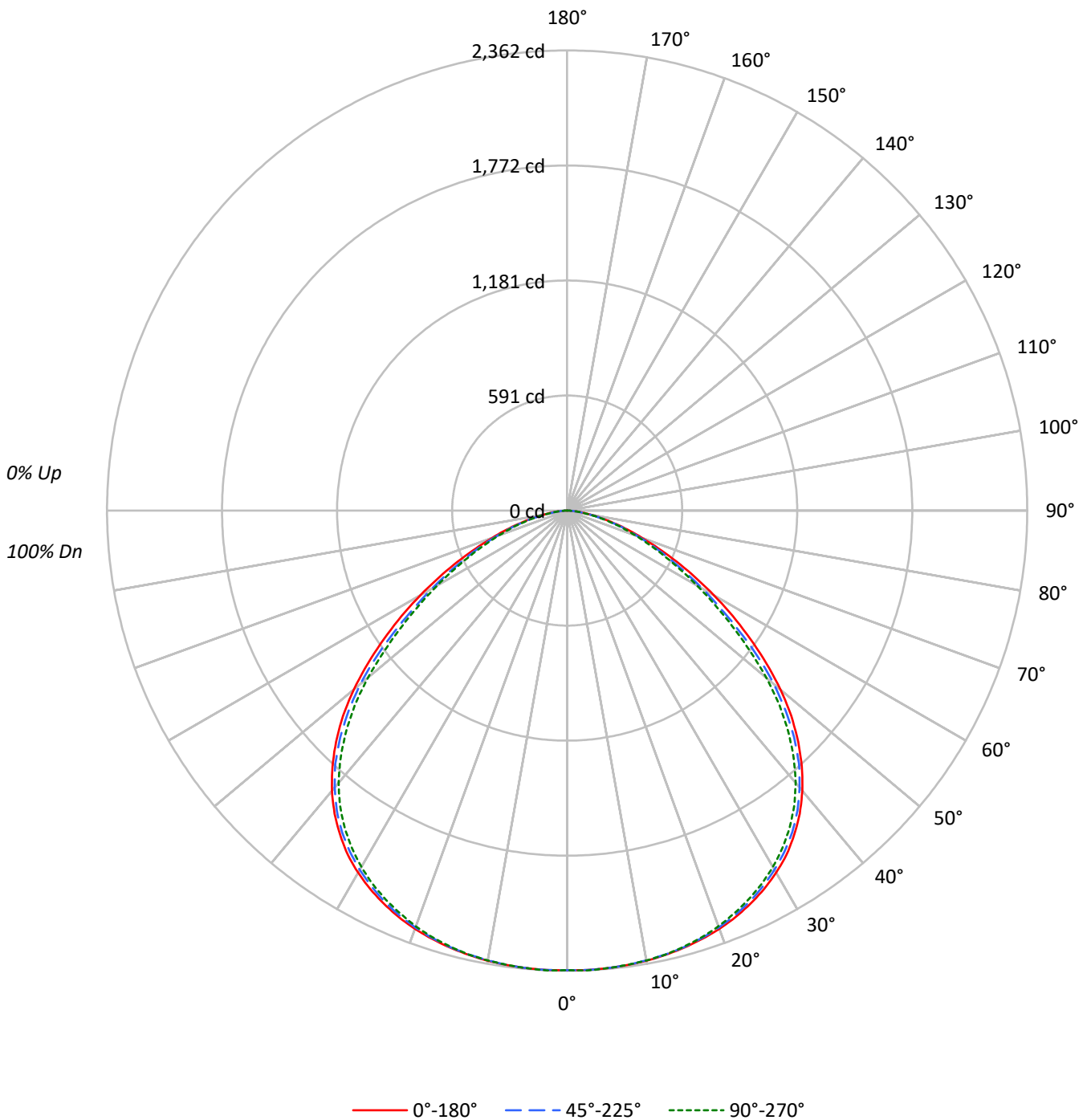
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6278.0 lumens
Efficiency: N/A
Efficacy: 120.0 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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CATALOG NUMBER: 24PD-70-PB1-L950

Luminous Intensity Polar Plot





TEST NUMBER: P412568

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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 | 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° | 3175 | 3175 | 3175 |
| 5° | 3185 | 3185 | 3185 |
| 10° | 3206 | 3203 | 3204 |
| 15° | 3235 | 3231 | 3228 |
| 20° | 3272 | 3261 | 3252 |
| 25° | 3306 | 3289 | 3271 |
| 30° | 3334 | 3307 | 3282 |
| 35° | 3338 | 3309 | 3268 |
| 40° | 3299 | 3261 | 3206 |
| 45° | 3192 | 3134 | 3053 |
| 50° | 2993 | 2901 | 2795 |
| 55° | 2690 | 2530 | 2426 |
| 60° | 2342 | 2155 | 2073 |
| 65° | 1971 | 1824 | 1744 |
| 70° | 1606 | 1525 | 1464 |
| 75° | 1287 | 1242 | 1190 |
| 80° | 989 | 911 | 886 |
| 85° | 618 | 599 | 599 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 224.6 | 3.6 |
| 10°-20° | 655.7 | 10.4 |
| 20°-30° | 1021.4 | 16.3 |
| 30°-40° | 1256.6 | 20.0 |
| 40°-50° | 1262.1 | 20.1 |
| 50°-60° | 972.8 | 15.5 |
| 60°-70° | 577.5 | 9.2 |
| 70°-80° | 257.1 | 4.1 |
| 80°-90° | 50.2 | 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° | 1901.7 | 30.3 |
| 0°-40° | 3158.3 | 50.3 |
| 0°-60° | 5393.2 | 85.9 |
| 0°-90° | 6278.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6278.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2359 | 2359 | 2359 | 2359 | 2359 | |
| 5° | 2358 | 2359 | 2358 | 2356 | 2358 | 225 |
| 15° | 2322 | 2322 | 2319 | 2316 | 2318 | 657 |
| 25° | 2227 | 2226 | 2216 | 2206 | 2203 | 1027 |
| 35° | 2032 | 2029 | 2015 | 1998 | 1990 | 1269 |
| 45° | 1678 | 1673 | 1647 | 1620 | 1605 | 1288 |
| 55° | 1147 | 1125 | 1079 | 1046 | 1034 | 1026 |
| 65° | 619 | 592 | 573 | 551 | 548 | 619 |
| 75° | 248 | 243 | 239 | 231 | 229 | 268 |
| 85° | 40 | 38 | 39 | 37 | 39 | 53 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P412568

CATALOG NUMBER: 24PD-70-PB1-L950

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2359.4 | 2359.4 | 2359.4 | 2359.4 | 2359.4 |
| 2.5° | 2360.6 | 2360.0 | 2360.0 | 2357.5 | 2362.5 |
| 5° | 2358.1 | 2358.7 | 2358.1 | 2355.6 | 2358.1 |
| 7.5° | 2353.1 | 2353.7 | 2352.5 | 2350.0 | 2352.5 |
| 10° | 2346.8 | 2346.8 | 2344.3 | 2343.1 | 2345.0 |
| 12.5° | 2336.2 | 2336.2 | 2333.7 | 2331.8 | 2333.7 |
| 15° | 2322.5 | 2322.5 | 2319.3 | 2315.6 | 2317.5 |
| 17.5° | 2305.6 | 2305.6 | 2300.6 | 2295.6 | 2296.8 |
| 20° | 2284.9 | 2284.3 | 2277.4 | 2270.6 | 2271.2 |
| 22.5° | 2258.7 | 2258.0 | 2249.3 | 2241.2 | 2238.7 |
| 25° | 2226.8 | 2226.2 | 2215.5 | 2205.5 | 2203.0 |
| 27.5° | 2189.9 | 2187.4 | 2175.5 | 2164.3 | 2161.7 |
| 30° | 2146.1 | 2144.2 | 2128.6 | 2117.4 | 2112.3 |
| 32.5° | 2095.5 | 2090.5 | 2076.1 | 2062.3 | 2055.4 |
| 35° | 2032.3 | 2029.2 | 2014.8 | 1997.9 | 1989.8 |
| 37.5° | 1961.0 | 1957.9 | 1942.3 | 1923.5 | 1914.1 |
| 40° | 1878.5 | 1876.0 | 1856.6 | 1837.2 | 1825.3 |
| 42.5° | 1783.4 | 1781.6 | 1760.9 | 1734.0 | 1721.5 |
| 45° | 1677.7 | 1673.4 | 1647.1 | 1619.6 | 1604.6 |
| 47.5° | 1560.2 | 1552.7 | 1520.8 | 1494.5 | 1478.3 |
| 50° | 1430.1 | 1420.1 | 1385.7 | 1352.0 | 1335.1 |
| 52.5° | 1289.4 | 1271.9 | 1236.3 | 1197.5 | 1181.2 |
| 55° | 1146.8 | 1125.0 | 1078.7 | 1046.2 | 1034.3 |
| 57.5° | 1007.4 | 975.5 | 931.7 | 908.6 | 896.7 |
| 60° | 870.5 | 835.4 | 801.0 | 778.5 | 770.4 |
| 62.5° | 739.8 | 710.4 | 681.0 | 658.5 | 653.5 |
| 65° | 619.1 | 592.2 | 572.8 | 550.9 | 547.8 |
| 67.5° | 506.5 | 494.0 | 476.5 | 457.7 | 455.2 |
| 70° | 408.3 | 403.3 | 387.7 | 376.4 | 372.1 |
| 72.5° | 325.8 | 320.8 | 309.5 | 301.4 | 300.2 |
| 75° | 247.6 | 242.6 | 238.9 | 230.7 | 228.9 |
| 77.5° | 176.3 | 177.0 | 173.8 | 169.5 | 170.7 |
| 80° | 127.6 | 120.1 | 117.6 | 115.1 | 114.4 |
| 82.5° | 78.2 | 73.8 | 71.9 | 71.3 | 72.5 |
| 85° | 40.0 | 38.1 | 38.8 | 36.9 | 38.8 |
| 87.5° | 13.8 | 13.8 | 14.4 | 13.8 | 15.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)