

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: P412532

Luminaire Tested: **24PD-50-PB1-L950**

Issue Date: 9/15/2020



Test Information

Test Method: LM-79-08
Report Number: P412532
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-50-PB1-L950
Description: 5000 LUMEN 2X4 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 90 CRI, 5000 CCT LEDS
Light Source: -
Ballast/Driver: -

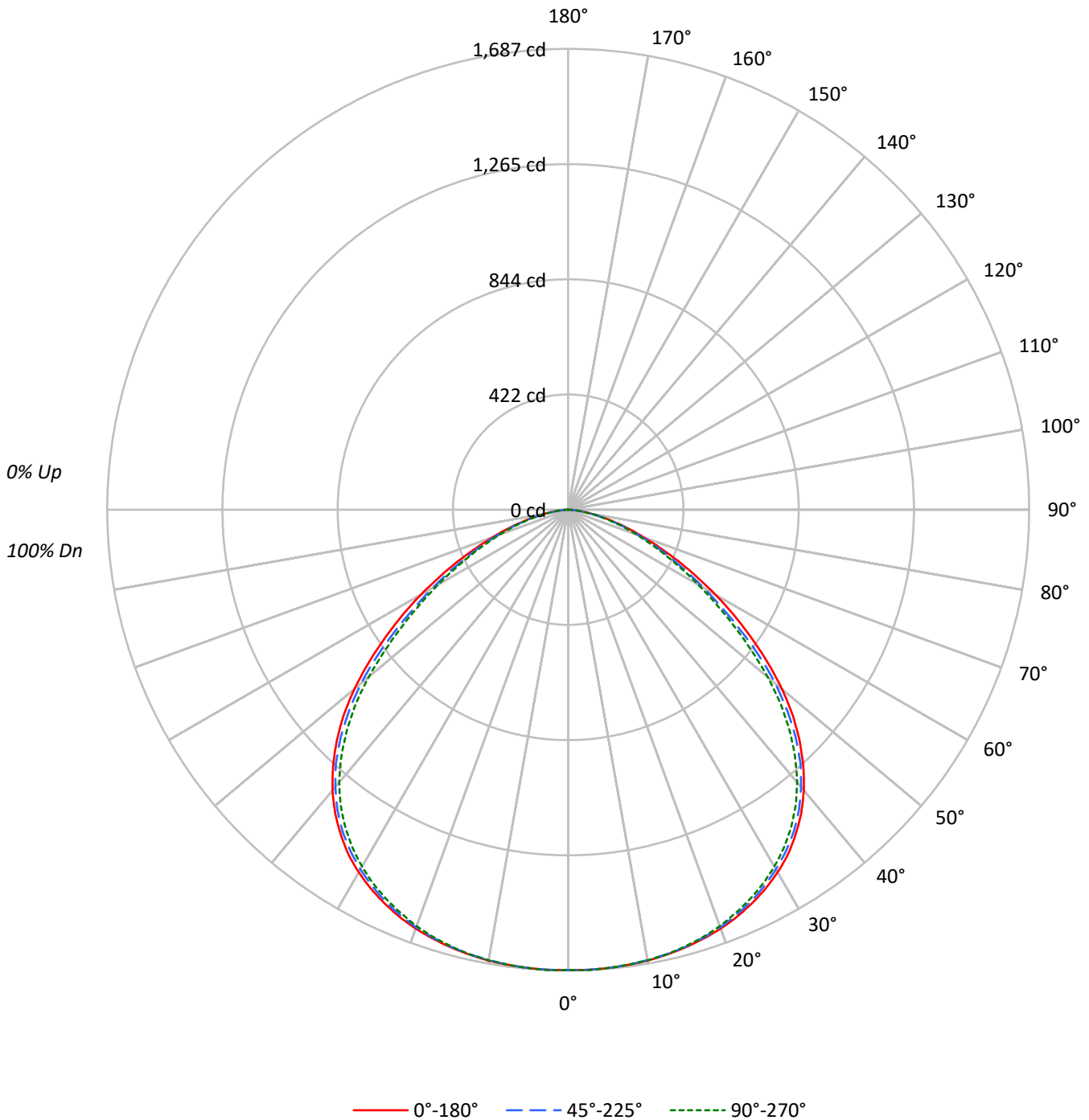
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4484.0 lumens
Efficiency: N/A
Efficacy: 119.6 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): 37.5
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

TEST NUMBER: P412532
CATALOG NUMBER: 24PD-50-PB1-L950

Luminous Intensity Polar Plot





TEST NUMBER: P412532

CATALOG NUMBER: 24PD-50-PB1-L950

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° | 2267 | 2267 | 2267 |
| 5° | 2275 | 2275 | 2275 |
| 10° | 2290 | 2288 | 2288 |
| 15° | 2311 | 2308 | 2306 |
| 20° | 2337 | 2329 | 2323 |
| 25° | 2361 | 2349 | 2336 |
| 30° | 2381 | 2362 | 2344 |
| 35° | 2384 | 2364 | 2334 |
| 40° | 2357 | 2329 | 2290 |
| 45° | 2280 | 2238 | 2181 |
| 50° | 2138 | 2072 | 1996 |
| 55° | 1921 | 1807 | 1733 |
| 60° | 1673 | 1540 | 1481 |
| 65° | 1408 | 1302 | 1246 |
| 70° | 1148 | 1089 | 1045 |
| 75° | 920 | 887 | 850 |
| 80° | 706 | 651 | 633 |
| 85° | 442 | 428 | 428 |



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CATALOG NUMBER: 24PD-50-PB1-L950

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 160.4 | 3.6 |
| 10°-20° | 468.3 | 10.4 |
| 20°-30° | 729.5 | 16.3 |
| 30°-40° | 897.5 | 20.0 |
| 40°-50° | 901.5 | 20.1 |
| 50°-60° | 694.8 | 15.5 |
| 60°-70° | 412.5 | 9.2 |
| 70°-80° | 183.7 | 4.1 |
| 80°-90° | 35.9 | 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° | 1358.3 | 30.3 |
| 0°-40° | 2255.7 | 50.3 |
| 0°-60° | 3852.0 | 85.9 |
| 0°-90° | 4484.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4484.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1685 | 1685 | 1685 | 1685 | 1685 | |
| 5° | 1684 | 1685 | 1684 | 1682 | 1684 | 161 |
| 15° | 1659 | 1659 | 1657 | 1654 | 1655 | 469 |
| 25° | 1590 | 1590 | 1582 | 1575 | 1574 | 733 |
| 35° | 1452 | 1449 | 1439 | 1427 | 1421 | 906 |
| 45° | 1198 | 1195 | 1176 | 1157 | 1146 | 920 |
| 55° | 819 | 804 | 770 | 747 | 739 | 732 |
| 65° | 442 | 423 | 409 | 394 | 391 | 442 |
| 75° | 177 | 173 | 171 | 165 | 164 | 191 |
| 85° | 29 | 27 | 28 | 26 | 28 | 38 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P412532

CATALOG NUMBER: 24PD-50-PB1-L950

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1685.1 | 1685.1 | 1685.1 | 1685.1 | 1685.1 |
| 2.5° | 1686.0 | 1685.6 | 1685.6 | 1683.8 | 1687.4 |
| 5° | 1684.3 | 1684.7 | 1684.3 | 1682.5 | 1684.3 |
| 7.5° | 1680.7 | 1681.1 | 1680.2 | 1678.4 | 1680.2 |
| 10° | 1676.2 | 1676.2 | 1674.4 | 1673.5 | 1674.9 |
| 12.5° | 1668.6 | 1668.6 | 1666.8 | 1665.5 | 1666.8 |
| 15° | 1658.8 | 1658.8 | 1656.6 | 1653.9 | 1655.2 |
| 17.5° | 1646.7 | 1646.7 | 1643.2 | 1639.6 | 1640.5 |
| 20° | 1632.0 | 1631.5 | 1626.6 | 1621.7 | 1622.2 |
| 22.5° | 1613.2 | 1612.8 | 1606.5 | 1600.7 | 1598.9 |
| 25° | 1590.5 | 1590.0 | 1582.4 | 1575.3 | 1573.5 |
| 27.5° | 1564.1 | 1562.3 | 1553.8 | 1545.8 | 1544.0 |
| 30° | 1532.8 | 1531.5 | 1520.3 | 1512.3 | 1508.7 |
| 32.5° | 1496.7 | 1493.1 | 1482.8 | 1473.0 | 1468.1 |
| 35° | 1451.6 | 1449.3 | 1439.0 | 1427.0 | 1421.2 |
| 37.5° | 1400.6 | 1398.4 | 1387.2 | 1373.8 | 1367.1 |
| 40° | 1341.7 | 1339.9 | 1326.1 | 1312.2 | 1303.7 |
| 42.5° | 1273.8 | 1272.5 | 1257.7 | 1238.5 | 1229.6 |
| 45° | 1198.3 | 1195.2 | 1176.4 | 1156.8 | 1146.1 |
| 47.5° | 1114.3 | 1109.0 | 1086.2 | 1067.5 | 1055.8 |
| 50° | 1021.4 | 1014.3 | 989.7 | 965.6 | 953.6 |
| 52.5° | 921.0 | 908.5 | 883.0 | 855.3 | 843.7 |
| 55° | 819.1 | 803.5 | 770.4 | 747.2 | 738.7 |
| 57.5° | 719.5 | 696.7 | 665.5 | 649.0 | 640.5 |
| 60° | 621.7 | 596.7 | 572.1 | 556.1 | 550.3 |
| 62.5° | 528.4 | 507.4 | 486.4 | 470.3 | 466.7 |
| 65° | 442.2 | 423.0 | 409.1 | 393.5 | 391.3 |
| 67.5° | 361.8 | 352.8 | 340.3 | 326.9 | 325.1 |
| 70° | 291.7 | 288.1 | 276.9 | 268.9 | 265.7 |
| 72.5° | 232.7 | 229.1 | 221.1 | 215.3 | 214.4 |
| 75° | 176.9 | 173.3 | 170.6 | 164.8 | 163.5 |
| 77.5° | 126.0 | 126.4 | 124.2 | 121.0 | 121.9 |
| 80° | 91.1 | 85.8 | 84.0 | 82.2 | 81.7 |
| 82.5° | 55.8 | 52.7 | 51.4 | 50.9 | 51.8 |
| 85° | 28.6 | 27.2 | 27.7 | 26.4 | 27.7 |
| 87.5° | 9.8 | 9.8 | 10.3 | 9.8 | 10.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)