

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: P412412

Luminaire Tested: **22PD-50-PB1-L930**

Issue Date: 9/15/2020



Test Information

Test Method: LM-79-08
Report Number: P412412
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-50-PB1-L930
Description: 5000 LUMEN 2X2 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 90 CRI, 3000 CCT LEDS
Light Source: -
Ballast/Driver: -

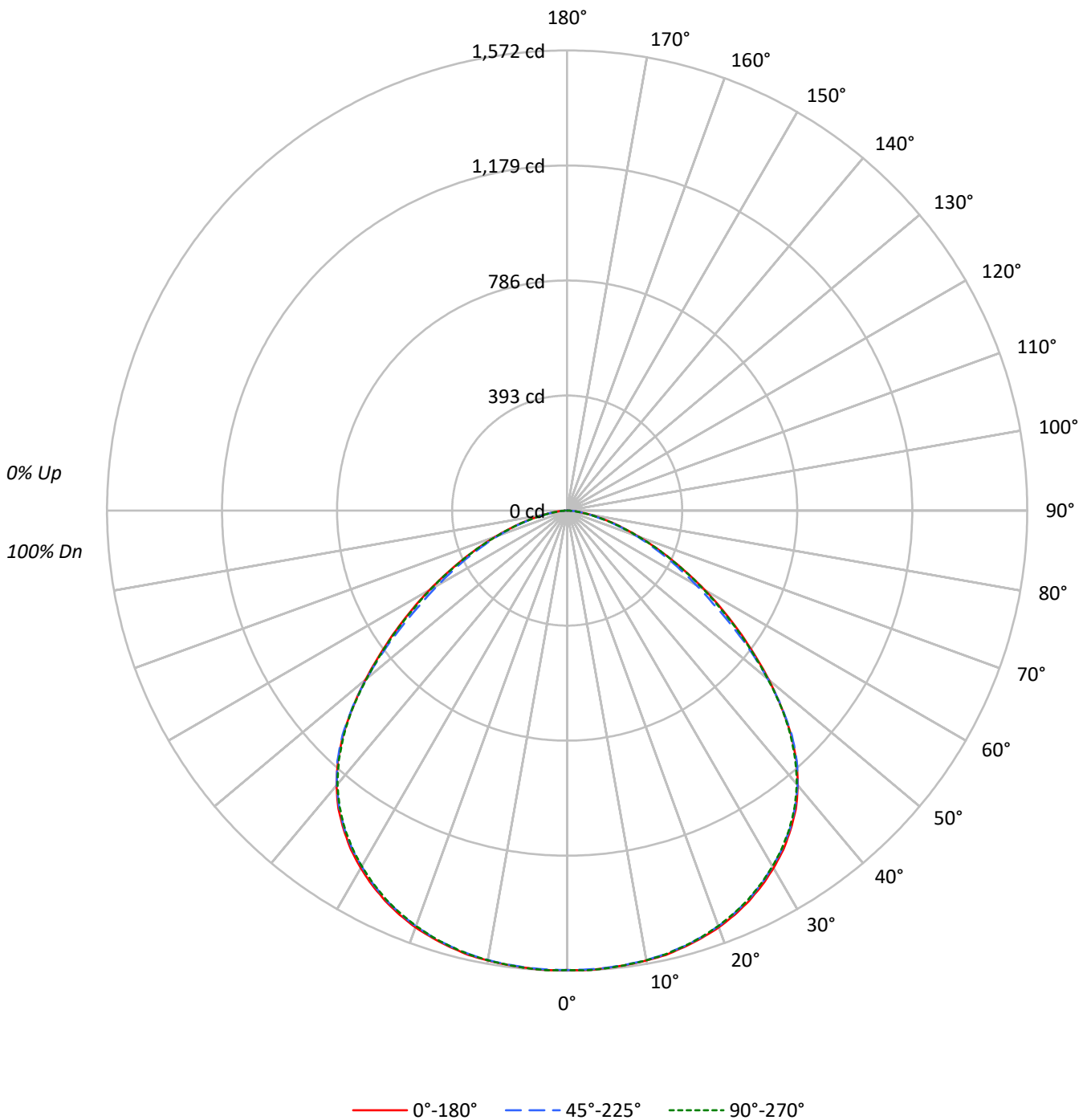
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4121.0 lumens
Efficiency: N/A
Efficacy: 97.0 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): 42.5
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

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Luminous Intensity Polar Plot





TEST NUMBER: P412412

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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4224 | 4224 | 4224 |
| 5° | 4237 | 4234 | 4239 |
| 10° | 4265 | 4260 | 4263 |
| 15° | 4300 | 4293 | 4293 |
| 20° | 4339 | 4327 | 4324 |
| 25° | 4367 | 4354 | 4349 |
| 30° | 4381 | 4363 | 4360 |
| 35° | 4372 | 4359 | 4351 |
| 40° | 4307 | 4302 | 4288 |
| 45° | 4117 | 4130 | 4099 |
| 50° | 3769 | 3749 | 3745 |
| 55° | 3350 | 3231 | 3327 |
| 60° | 2920 | 2743 | 2902 |
| 65° | 2476 | 2343 | 2463 |
| 70° | 2047 | 1963 | 2028 |
| 75° | 1655 | 1549 | 1590 |
| 80° | 1196 | 1158 | 1151 |
| 85° | 778 | 778 | 750 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 149.4 | 3.6 |
| 10°-20° | 435.6 | 10.6 |
| 20°-30° | 675.9 | 16.4 |
| 30°-40° | 828.9 | 20.1 |
| 40°-50° | 828.6 | 20.1 |
| 50°-60° | 627.6 | 15.2 |
| 60°-70° | 376.4 | 9.1 |
| 70°-80° | 165.7 | 4.0 |
| 80°-90° | 32.9 | 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° | 1260.9 | 30.6 |
| 0°-40° | 2089.8 | 50.7 |
| 0°-60° | 3546.0 | 86.0 |
| 0°-90° | 4121.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4121.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1570 | 1570 | 1570 | 1570 | 1570 | |
| 5° | 1569 | 1567 | 1567 | 1567 | 1569 | 149 |
| 15° | 1544 | 1542 | 1541 | 1540 | 1541 | 436 |
| 25° | 1471 | 1468 | 1466 | 1464 | 1465 | 678 |
| 35° | 1331 | 1330 | 1327 | 1326 | 1325 | 831 |
| 45° | 1082 | 1083 | 1085 | 1082 | 1077 | 828 |
| 55° | 714 | 698 | 689 | 698 | 709 | 640 |
| 65° | 389 | 375 | 368 | 374 | 387 | 389 |
| 75° | 159 | 156 | 149 | 151 | 153 | 170 |
| 85° | 25 | 26 | 25 | 24 | 24 | 33 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1569.7 | 1569.7 | 1569.7 | 1569.7 | 1569.7 |
| 2.5° | 1571.1 | 1568.7 | 1569.2 | 1569.2 | 1572.1 |
| 5° | 1568.7 | 1566.8 | 1567.3 | 1566.8 | 1569.2 |
| 7.5° | 1565.3 | 1563.4 | 1563.9 | 1563.4 | 1564.8 |
| 10° | 1560.9 | 1559.0 | 1559.0 | 1558.0 | 1560.0 |
| 12.5° | 1555.1 | 1552.7 | 1551.7 | 1551.2 | 1552.7 |
| 15° | 1543.5 | 1542.0 | 1541.0 | 1540.1 | 1541.0 |
| 17.5° | 1530.9 | 1528.4 | 1527.5 | 1525.5 | 1527.5 |
| 20° | 1515.3 | 1511.9 | 1511.0 | 1509.5 | 1510.0 |
| 22.5° | 1494.9 | 1492.0 | 1490.6 | 1488.1 | 1489.1 |
| 25° | 1470.7 | 1467.8 | 1466.3 | 1463.9 | 1464.8 |
| 27.5° | 1442.5 | 1440.6 | 1437.2 | 1435.2 | 1435.7 |
| 30° | 1410.0 | 1408.1 | 1404.2 | 1403.2 | 1403.2 |
| 32.5° | 1374.1 | 1371.7 | 1368.3 | 1367.3 | 1366.8 |
| 35° | 1330.9 | 1330.4 | 1327.0 | 1326.0 | 1324.6 |
| 37.5° | 1283.8 | 1282.8 | 1278.9 | 1278.0 | 1276.5 |
| 40° | 1226.0 | 1225.1 | 1224.6 | 1222.6 | 1220.7 |
| 42.5° | 1159.1 | 1160.5 | 1161.5 | 1157.6 | 1153.7 |
| 45° | 1081.9 | 1083.3 | 1085.3 | 1082.4 | 1077.0 |
| 47.5° | 991.6 | 997.4 | 994.5 | 996.5 | 991.1 |
| 50° | 900.4 | 900.4 | 895.5 | 897.4 | 894.5 |
| 52.5° | 804.7 | 797.0 | 791.2 | 795.0 | 798.9 |
| 55° | 714.0 | 698.4 | 688.7 | 698.0 | 709.1 |
| 57.5° | 627.1 | 608.7 | 590.7 | 605.3 | 618.8 |
| 60° | 542.6 | 521.3 | 509.6 | 520.3 | 539.2 |
| 62.5° | 462.6 | 447.0 | 435.4 | 443.6 | 459.6 |
| 65° | 388.8 | 375.2 | 367.9 | 374.2 | 386.8 |
| 67.5° | 321.3 | 312.1 | 304.8 | 310.2 | 319.9 |
| 70° | 260.2 | 257.7 | 249.5 | 251.9 | 257.7 |
| 72.5° | 204.3 | 203.9 | 196.6 | 198.5 | 201.9 |
| 75° | 159.2 | 155.8 | 149.0 | 151.4 | 152.9 |
| 77.5° | 112.6 | 114.1 | 107.8 | 109.2 | 109.2 |
| 80° | 77.2 | 79.6 | 74.7 | 73.8 | 74.3 |
| 82.5° | 49.0 | 49.0 | 48.5 | 48.1 | 46.6 |
| 85° | 25.2 | 26.2 | 25.2 | 24.3 | 24.3 |
| 87.5° | 9.7 | 9.7 | 9.7 | 9.2 | 8.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)