

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: P298707

Luminaire Tested: **24FPX-47-347-L830-SWPD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P298707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1903-179-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24FPX-47-347-L830-SWPD1
Description: 2x4 FPX SERIES LED PANEL, 3000K CCT AND 80CRI
Light Source: -
Ballast/Driver: -

Summary

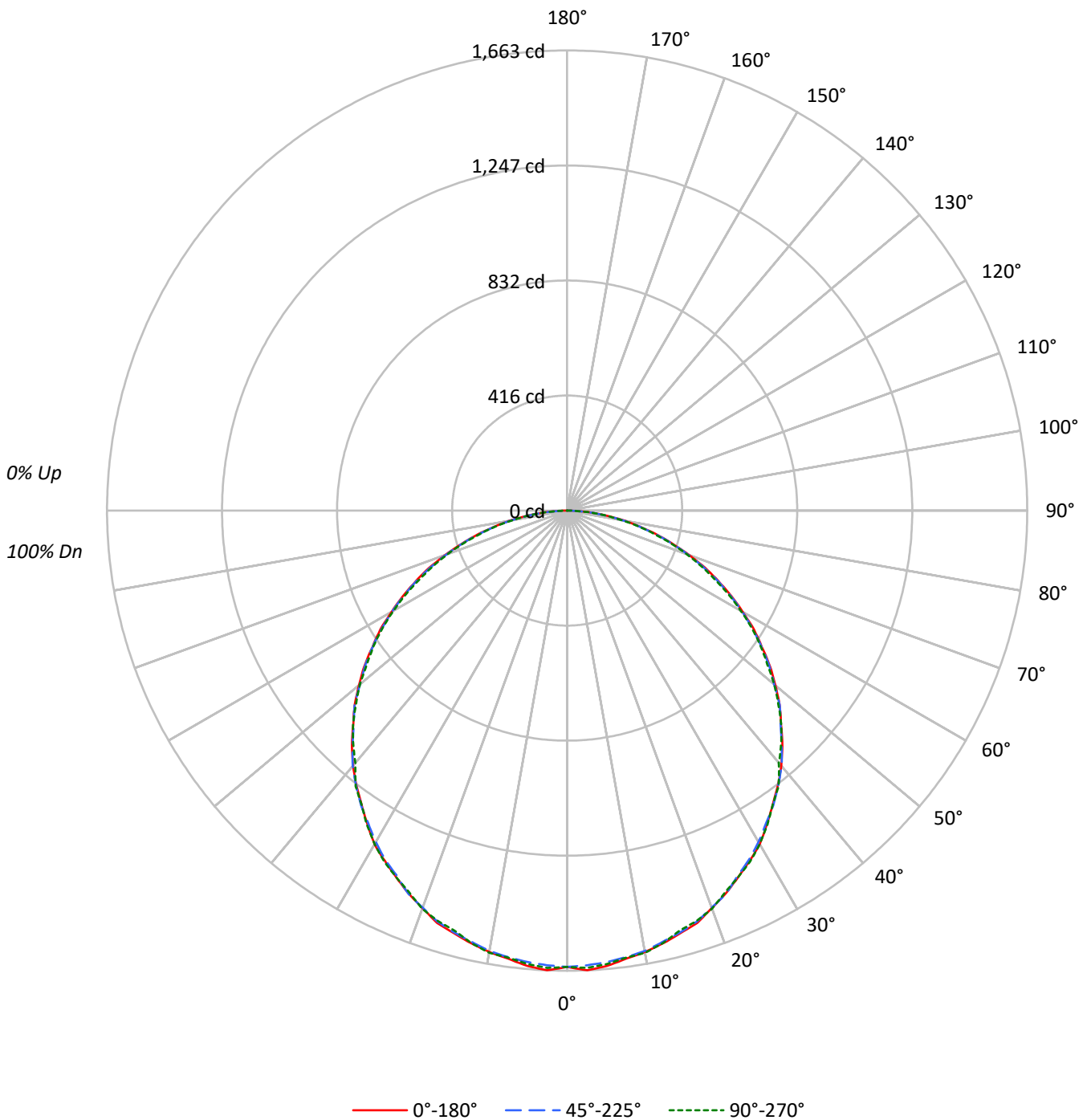
Lumens per Lamp: N/A
Luminaire Lumens: 4742.1 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 40.08
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 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 90 | 87 | 85 | 83 |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 72 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 69 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 52 | 49 |
| 5 | 75 | 62 | 53 | 47 | 73 | 61 | 53 | 46 | 59 | 52 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 43 |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 40 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 40 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 26 |
| 10 | 53 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2219 | 2219 | 2219 |
| 5° | 2231 | 2212 | 2221 |
| 10° | 2213 | 2207 | 2217 |
| 15° | 2202 | 2198 | 2189 |
| 20° | 2188 | 2186 | 2192 |
| 25° | 2170 | 2162 | 2170 |
| 30° | 2164 | 2149 | 2161 |
| 35° | 2128 | 2135 | 2128 |
| 40° | 2115 | 2117 | 2091 |
| 45° | 2080 | 2075 | 2083 |
| 50° | 2056 | 2045 | 2045 |
| 55° | 2015 | 2012 | 2002 |
| 60° | 1972 | 1965 | 1950 |
| 65° | 1919 | 1910 | 1875 |
| 70° | 1842 | 1826 | 1804 |
| 75° | 1750 | 1722 | 1693 |
| 80° | 1632 | 1578 | 1557 |
| 85° | 1433 | 1369 | 1348 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 155.8 | 3.3 |
| 10°-20° | 445.1 | 9.4 |
| 20°-30° | 674.1 | 14.2 |
| 30°-40° | 812.2 | 17.1 |
| 40°-50° | 844.5 | 17.8 |
| 50°-60° | 766.4 | 16.2 |
| 60°-70° | 591.7 | 12.5 |
| 70°-80° | 350.5 | 7.4 |
| 80°-90° | 101.8 | 2.1 |
| 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° | 1274.9 | 26.9 |
| 0°-40° | 2087.2 | 44.0 |
| 0°-60° | 3698.2 | 78.0 |
| 0°-90° | 4742.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4742.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1649 | 1649 | 1649 | 1649 | 1649 | |
| 5° | 1652 | 1643 | 1638 | 1634 | 1645 | 156 |
| 15° | 1581 | 1574 | 1578 | 1576 | 1571 | 447 |
| 25° | 1462 | 1463 | 1456 | 1458 | 1462 | 675 |
| 35° | 1296 | 1297 | 1300 | 1298 | 1296 | 813 |
| 45° | 1093 | 1096 | 1090 | 1093 | 1095 | 846 |
| 55° | 859 | 862 | 858 | 856 | 854 | 770 |
| 65° | 603 | 603 | 600 | 594 | 589 | 597 |
| 75° | 337 | 334 | 331 | 328 | 326 | 355 |
| 85° | 93 | 89 | 89 | 87 | 87 | 105 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1648.9 | 1648.9 | 1648.9 | 1648.9 | 1648.9 |
| 2.5° | 1662.8 | 1642.0 | 1644.7 | 1639.2 | 1654.4 |
| 5° | 1651.7 | 1643.4 | 1637.8 | 1633.7 | 1644.7 |
| 7.5° | 1633.7 | 1626.7 | 1628.1 | 1626.7 | 1629.5 |
| 10° | 1619.8 | 1619.8 | 1615.6 | 1611.5 | 1622.6 |
| 12.5° | 1601.8 | 1601.8 | 1596.2 | 1592.1 | 1600.4 |
| 15° | 1581.0 | 1574.1 | 1578.2 | 1575.5 | 1571.3 |
| 17.5° | 1563.0 | 1554.7 | 1557.5 | 1545.0 | 1554.7 |
| 20° | 1528.4 | 1525.6 | 1527.0 | 1520.0 | 1531.1 |
| 22.5° | 1497.9 | 1502.0 | 1499.3 | 1496.5 | 1492.3 |
| 25° | 1461.8 | 1463.2 | 1456.3 | 1457.7 | 1461.8 |
| 27.5° | 1427.2 | 1431.4 | 1423.0 | 1423.0 | 1431.4 |
| 30° | 1392.6 | 1387.0 | 1382.9 | 1391.2 | 1391.2 |
| 32.5° | 1344.1 | 1338.5 | 1338.5 | 1342.7 | 1346.8 |
| 35° | 1295.6 | 1297.0 | 1299.7 | 1298.3 | 1295.6 |
| 37.5° | 1251.2 | 1248.5 | 1252.6 | 1252.6 | 1255.4 |
| 40° | 1204.1 | 1206.9 | 1205.5 | 1200.0 | 1190.3 |
| 42.5° | 1151.5 | 1154.2 | 1147.3 | 1154.2 | 1144.5 |
| 45° | 1093.3 | 1096.0 | 1090.5 | 1093.3 | 1094.6 |
| 47.5° | 1042.0 | 1039.2 | 1042.0 | 1037.8 | 1035.1 |
| 50° | 982.4 | 981.0 | 976.9 | 976.9 | 976.9 |
| 52.5° | 924.2 | 920.1 | 920.1 | 920.1 | 911.7 |
| 55° | 859.1 | 861.9 | 857.7 | 856.3 | 853.5 |
| 57.5° | 800.9 | 795.4 | 794.0 | 794.0 | 792.6 |
| 60° | 733.0 | 731.6 | 730.2 | 727.5 | 724.7 |
| 62.5° | 669.3 | 663.7 | 665.1 | 662.3 | 658.2 |
| 65° | 602.8 | 602.8 | 600.0 | 594.4 | 588.9 |
| 67.5° | 539.0 | 536.2 | 532.1 | 529.3 | 523.8 |
| 70° | 468.3 | 467.0 | 464.2 | 461.4 | 458.6 |
| 72.5° | 400.4 | 399.1 | 397.7 | 394.9 | 392.1 |
| 75° | 336.7 | 333.9 | 331.2 | 328.4 | 325.6 |
| 77.5° | 270.2 | 268.8 | 267.4 | 263.3 | 263.3 |
| 80° | 210.6 | 206.5 | 203.7 | 202.3 | 200.9 |
| 82.5° | 148.3 | 148.3 | 145.5 | 144.1 | 144.1 |
| 85° | 92.8 | 88.7 | 88.7 | 87.3 | 87.3 |
| 87.5° | 40.2 | 38.8 | 36.0 | 36.0 | 36.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)