

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: P298708

Luminaire Tested: **24FPX-47-347-L835-SWPD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P298708
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-L835-SWPD1
Description: 2x4 FPX SERIES LED PANEL, 3500K CCT AND 80CRI
Light Source: -
Ballast/Driver: -

Summary

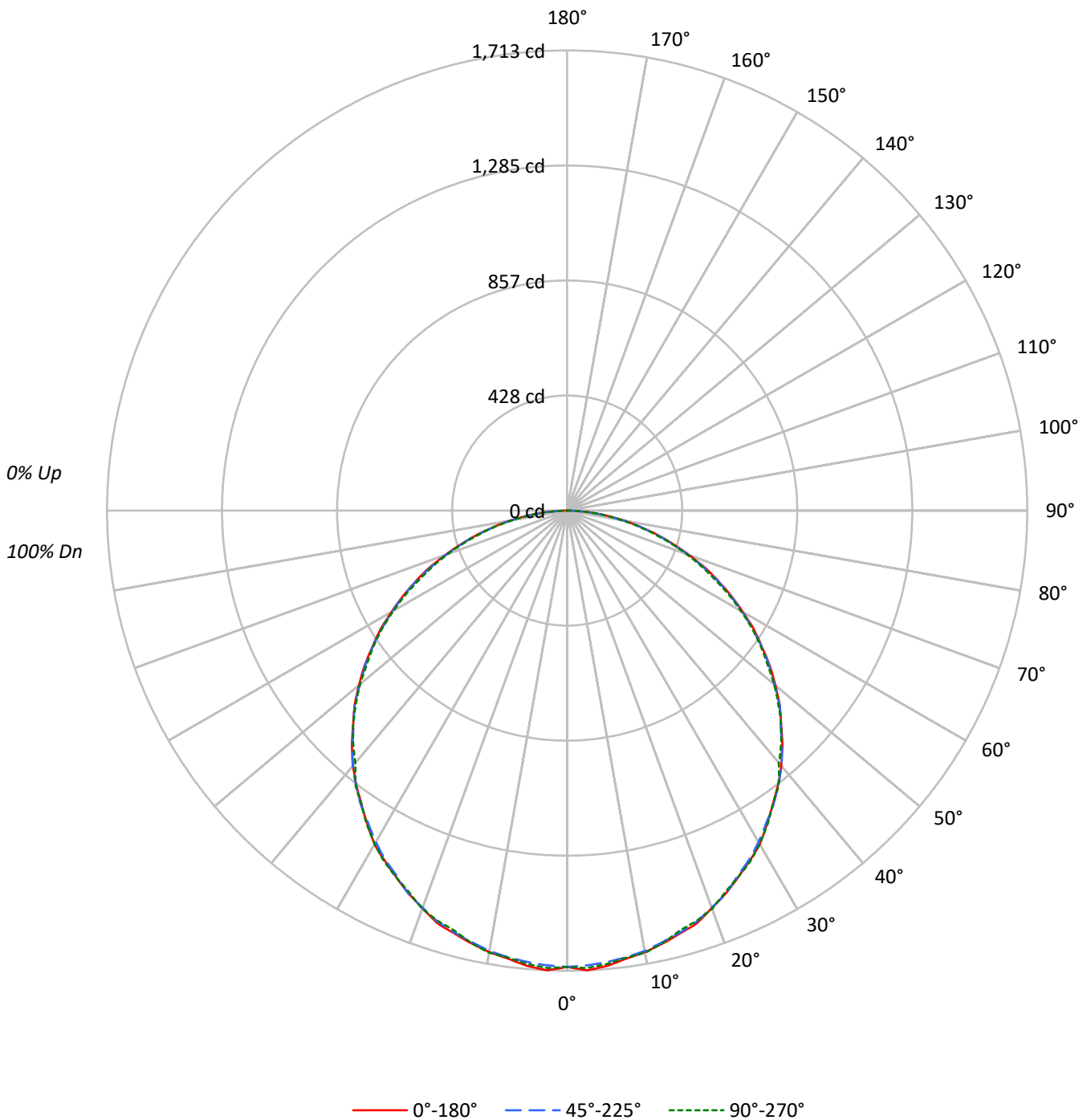
Lumens per Lamp: N/A
Luminaire Lumens: 4885.0 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P298708

CATALOG NUMBER: 24FPX-47-347-L835-SWPD1

Luminous Intensity Polar Plot





TEST NUMBER: P298708

CATALOG NUMBER: 24FPX-47-347-L835-SWPD1

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° | 2285 | 2285 | 2285 |
| 5° | 2298 | 2279 | 2288 |
| 10° | 2280 | 2274 | 2284 |
| 15° | 2269 | 2265 | 2255 |
| 20° | 2254 | 2252 | 2258 |
| 25° | 2236 | 2227 | 2236 |
| 30° | 2229 | 2213 | 2227 |
| 35° | 2192 | 2199 | 2192 |
| 40° | 2179 | 2181 | 2154 |
| 45° | 2143 | 2138 | 2146 |
| 50° | 2118 | 2106 | 2106 |
| 55° | 2076 | 2073 | 2063 |
| 60° | 2032 | 2024 | 2009 |
| 65° | 1977 | 1968 | 1931 |
| 70° | 1898 | 1881 | 1859 |
| 75° | 1803 | 1773 | 1744 |
| 80° | 1681 | 1626 | 1604 |
| 85° | 1476 | 1411 | 1388 |



TEST NUMBER: P298708

CATALOG NUMBER: 24FPX-47-347-L835-SWPD1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 160.5 | 3.3 |
| 10°-20° | 458.5 | 9.4 |
| 20°-30° | 694.4 | 14.2 |
| 30°-40° | 836.7 | 17.1 |
| 40°-50° | 870.0 | 17.8 |
| 50°-60° | 789.5 | 16.2 |
| 60°-70° | 609.5 | 12.5 |
| 70°-80° | 361.0 | 7.4 |
| 80°-90° | 104.9 | 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° | 1313.4 | 26.9 |
| 0°-40° | 2150.1 | 44.0 |
| 0°-60° | 3809.6 | 78.0 |
| 0°-90° | 4885.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4885.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1699 | 1699 | 1699 | 1699 | 1699 | |
| 5° | 1702 | 1693 | 1687 | 1683 | 1694 | 161 |
| 15° | 1629 | 1622 | 1626 | 1623 | 1619 | 460 |
| 25° | 1506 | 1507 | 1500 | 1502 | 1506 | 695 |
| 35° | 1335 | 1336 | 1339 | 1338 | 1335 | 837 |
| 45° | 1126 | 1129 | 1123 | 1126 | 1128 | 871 |
| 55° | 885 | 888 | 884 | 882 | 879 | 793 |
| 65° | 621 | 621 | 618 | 612 | 607 | 615 |
| 75° | 347 | 344 | 341 | 338 | 335 | 366 |
| 85° | 96 | 91 | 91 | 90 | 90 | 108 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P298708

CATALOG NUMBER: 24FPX-47-347-L835-SWPD1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1698.6 | 1698.6 | 1698.6 | 1698.6 | 1698.6 |
| 2.5° | 1712.9 | 1691.5 | 1694.3 | 1688.6 | 1704.3 |
| 5° | 1701.5 | 1692.9 | 1687.2 | 1682.9 | 1694.3 |
| 7.5° | 1682.9 | 1675.8 | 1677.2 | 1675.8 | 1678.6 |
| 10° | 1668.6 | 1668.6 | 1664.3 | 1660.1 | 1671.5 |
| 12.5° | 1650.1 | 1650.1 | 1644.4 | 1640.1 | 1648.6 |
| 15° | 1628.7 | 1621.5 | 1625.8 | 1622.9 | 1618.7 |
| 17.5° | 1610.1 | 1601.5 | 1604.4 | 1591.5 | 1601.5 |
| 20° | 1574.4 | 1571.6 | 1573.0 | 1565.9 | 1577.3 |
| 22.5° | 1543.0 | 1547.3 | 1544.4 | 1541.6 | 1537.3 |
| 25° | 1505.9 | 1507.3 | 1500.2 | 1501.6 | 1505.9 |
| 27.5° | 1470.2 | 1474.5 | 1465.9 | 1465.9 | 1474.5 |
| 30° | 1434.5 | 1428.8 | 1424.5 | 1433.1 | 1433.1 |
| 32.5° | 1384.6 | 1378.9 | 1378.9 | 1383.1 | 1387.4 |
| 35° | 1334.6 | 1336.0 | 1338.9 | 1337.5 | 1334.6 |
| 37.5° | 1288.9 | 1286.1 | 1290.4 | 1290.4 | 1293.2 |
| 40° | 1240.4 | 1243.3 | 1241.8 | 1236.1 | 1226.1 |
| 42.5° | 1186.2 | 1189.0 | 1181.9 | 1189.0 | 1179.0 |
| 45° | 1126.2 | 1129.1 | 1123.4 | 1126.2 | 1127.6 |
| 47.5° | 1073.4 | 1070.5 | 1073.4 | 1069.1 | 1066.3 |
| 50° | 1012.0 | 1010.6 | 1006.3 | 1006.3 | 1006.3 |
| 52.5° | 952.1 | 947.8 | 947.8 | 947.8 | 939.2 |
| 55° | 885.0 | 887.8 | 883.6 | 882.1 | 879.3 |
| 57.5° | 825.0 | 819.3 | 817.9 | 817.9 | 816.5 |
| 60° | 755.1 | 753.7 | 752.2 | 749.4 | 746.5 |
| 62.5° | 689.4 | 683.7 | 685.1 | 682.3 | 678.0 |
| 65° | 620.9 | 620.9 | 618.1 | 612.4 | 606.6 |
| 67.5° | 555.3 | 552.4 | 548.1 | 545.3 | 539.6 |
| 70° | 482.5 | 481.0 | 478.2 | 475.3 | 472.5 |
| 72.5° | 412.5 | 411.1 | 409.7 | 406.8 | 404.0 |
| 75° | 346.9 | 344.0 | 341.1 | 338.3 | 335.4 |
| 77.5° | 278.3 | 276.9 | 275.5 | 271.2 | 271.2 |
| 80° | 217.0 | 212.7 | 209.8 | 208.4 | 207.0 |
| 82.5° | 152.7 | 152.7 | 149.9 | 148.4 | 148.4 |
| 85° | 95.6 | 91.4 | 91.4 | 89.9 | 89.9 |
| 87.5° | 41.4 | 40.0 | 37.1 | 37.1 | 37.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)