

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: P298706

Luminaire Tested: **24FPX-38-347-L840-HE-SWPD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P298706
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-38-347-L840-HE-SWPD1
Description: 2x4 FPX SERIES LED PANEL, 4000K CCT AND 80CRI
Light Source: -
Ballast/Driver: -

Summary

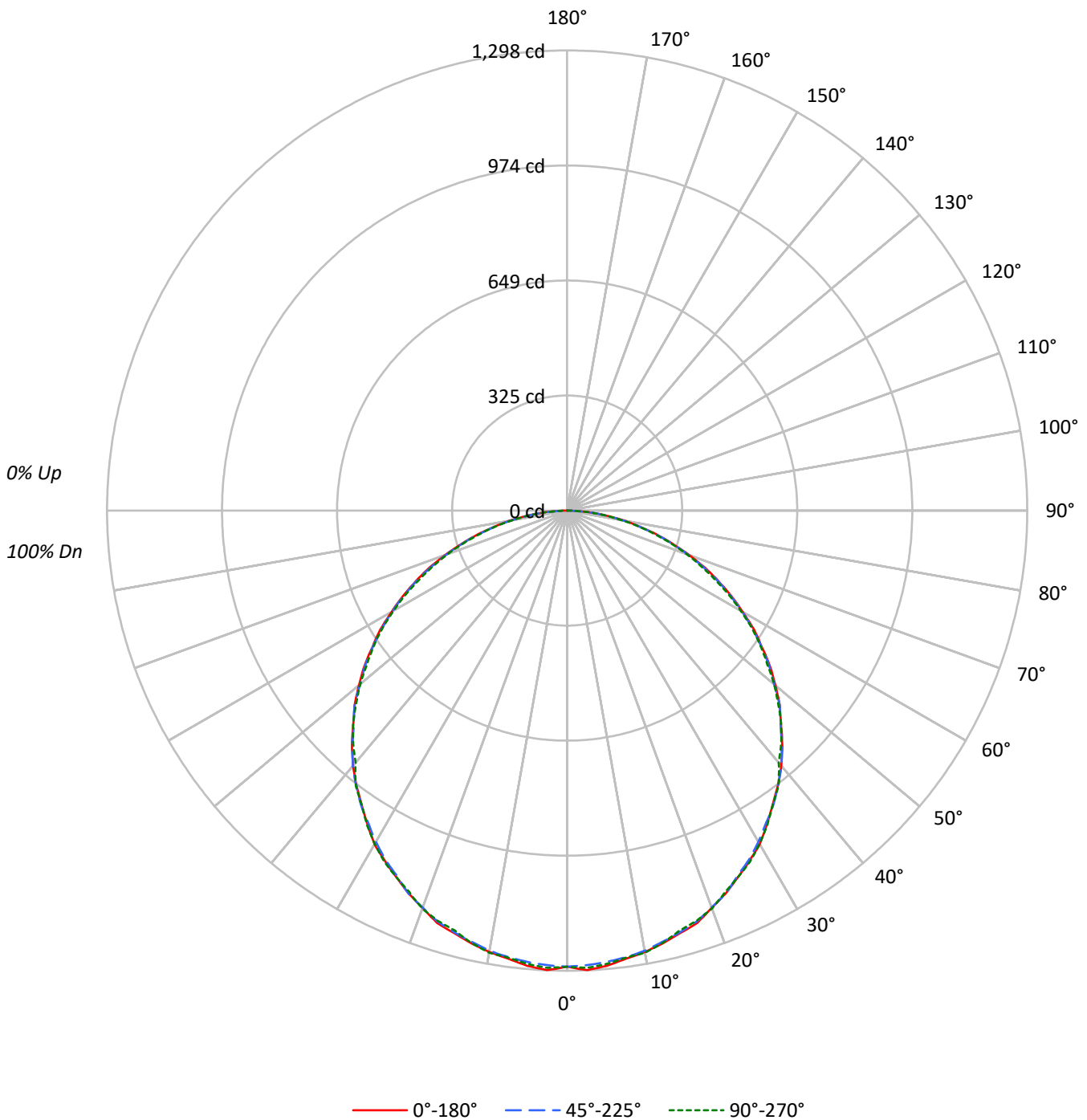
Lumens per Lamp: N/A
Luminaire Lumens: 3700.5 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.6
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° | 1731 | 1731 | 1731 |
| 5° | 1741 | 1726 | 1734 |
| 10° | 1727 | 1723 | 1730 |
| 15° | 1718 | 1716 | 1708 |
| 20° | 1708 | 1706 | 1711 |
| 25° | 1693 | 1687 | 1693 |
| 30° | 1688 | 1677 | 1687 |
| 35° | 1661 | 1666 | 1661 |
| 40° | 1650 | 1652 | 1631 |
| 45° | 1623 | 1619 | 1625 |
| 50° | 1605 | 1596 | 1596 |
| 55° | 1573 | 1570 | 1563 |
| 60° | 1539 | 1533 | 1522 |
| 65° | 1498 | 1491 | 1463 |
| 70° | 1438 | 1425 | 1408 |
| 75° | 1366 | 1343 | 1321 |
| 80° | 1274 | 1231 | 1215 |
| 85° | 1118 | 1068 | 1051 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 121.6 | 3.3 |
| 10°-20° | 347.3 | 9.4 |
| 20°-30° | 526.0 | 14.2 |
| 30°-40° | 633.8 | 17.1 |
| 40°-50° | 659.0 | 17.8 |
| 50°-60° | 598.1 | 16.2 |
| 60°-70° | 461.7 | 12.5 |
| 70°-80° | 273.5 | 7.4 |
| 80°-90° | 79.4 | 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° | 994.9 | 26.9 |
| 0°-40° | 1628.7 | 44.0 |
| 0°-60° | 2885.9 | 78.0 |
| 0°-90° | 3700.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3700.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1287 | 1287 | 1287 | 1287 | 1287 | |
| 5° | 1289 | 1282 | 1278 | 1275 | 1284 | 122 |
| 15° | 1234 | 1228 | 1232 | 1229 | 1226 | 349 |
| 25° | 1141 | 1142 | 1136 | 1138 | 1141 | 527 |
| 35° | 1011 | 1012 | 1014 | 1013 | 1011 | 634 |
| 45° | 853 | 855 | 851 | 853 | 854 | 660 |
| 55° | 670 | 673 | 669 | 668 | 666 | 601 |
| 65° | 470 | 470 | 468 | 464 | 460 | 466 |
| 75° | 263 | 261 | 258 | 256 | 254 | 277 |
| 85° | 72 | 69 | 69 | 68 | 68 | 82 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1286.7 | 1286.7 | 1286.7 | 1286.7 | 1286.7 |
| 2.5° | 1297.5 | 1281.3 | 1283.5 | 1279.1 | 1291.0 |
| 5° | 1288.9 | 1282.4 | 1278.1 | 1274.8 | 1283.5 |
| 7.5° | 1274.8 | 1269.4 | 1270.5 | 1269.4 | 1271.6 |
| 10° | 1264.0 | 1264.0 | 1260.8 | 1257.5 | 1266.2 |
| 12.5° | 1250.0 | 1250.0 | 1245.6 | 1242.4 | 1248.9 |
| 15° | 1233.7 | 1228.3 | 1231.6 | 1229.4 | 1226.2 |
| 17.5° | 1219.7 | 1213.2 | 1215.4 | 1205.6 | 1213.2 |
| 20° | 1192.6 | 1190.5 | 1191.6 | 1186.2 | 1194.8 |
| 22.5° | 1168.9 | 1172.1 | 1169.9 | 1167.8 | 1164.5 |
| 25° | 1140.7 | 1141.8 | 1136.4 | 1137.5 | 1140.7 |
| 27.5° | 1113.7 | 1117.0 | 1110.5 | 1110.5 | 1117.0 |
| 30° | 1086.7 | 1082.4 | 1079.1 | 1085.6 | 1085.6 |
| 32.5° | 1048.8 | 1044.5 | 1044.5 | 1047.8 | 1051.0 |
| 35° | 1011.0 | 1012.1 | 1014.2 | 1013.2 | 1011.0 |
| 37.5° | 976.4 | 974.2 | 977.5 | 977.5 | 979.6 |
| 40° | 939.6 | 941.8 | 940.7 | 936.4 | 928.8 |
| 42.5° | 898.5 | 900.7 | 895.3 | 900.7 | 893.1 |
| 45° | 853.1 | 855.3 | 851.0 | 853.1 | 854.2 |
| 47.5° | 813.1 | 811.0 | 813.1 | 809.9 | 807.7 |
| 50° | 766.6 | 765.5 | 762.3 | 762.3 | 762.3 |
| 52.5° | 721.2 | 718.0 | 718.0 | 718.0 | 711.5 |
| 55° | 670.4 | 672.6 | 669.3 | 668.2 | 666.1 |
| 57.5° | 625.0 | 620.7 | 619.6 | 619.6 | 618.5 |
| 60° | 572.0 | 570.9 | 569.8 | 567.7 | 565.5 |
| 62.5° | 522.3 | 517.9 | 519.0 | 516.8 | 513.6 |
| 65° | 470.4 | 470.4 | 468.2 | 463.9 | 459.5 |
| 67.5° | 420.6 | 418.5 | 415.2 | 413.0 | 408.7 |
| 70° | 365.5 | 364.4 | 362.2 | 360.1 | 357.9 |
| 72.5° | 312.5 | 311.4 | 310.3 | 308.2 | 306.0 |
| 75° | 262.7 | 260.6 | 258.4 | 256.3 | 254.1 |
| 77.5° | 210.8 | 209.8 | 208.7 | 205.4 | 205.4 |
| 80° | 164.4 | 161.1 | 158.9 | 157.9 | 156.8 |
| 82.5° | 115.7 | 115.7 | 113.5 | 112.5 | 112.5 |
| 85° | 72.4 | 69.2 | 69.2 | 68.1 | 68.1 |
| 87.5° | 31.4 | 30.3 | 28.1 | 28.1 | 28.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)