

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: P298574

Luminaire Tested: **22FPX-32-L830-L5-SWPD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P298574
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1903-179-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22FPX-32-L830-L5-SWPD1
Description: 2x2 FPX SERIES LED PANEL, 3000K CCT AND 80CRI
Light Source: -
Ballast/Driver: -

Summary

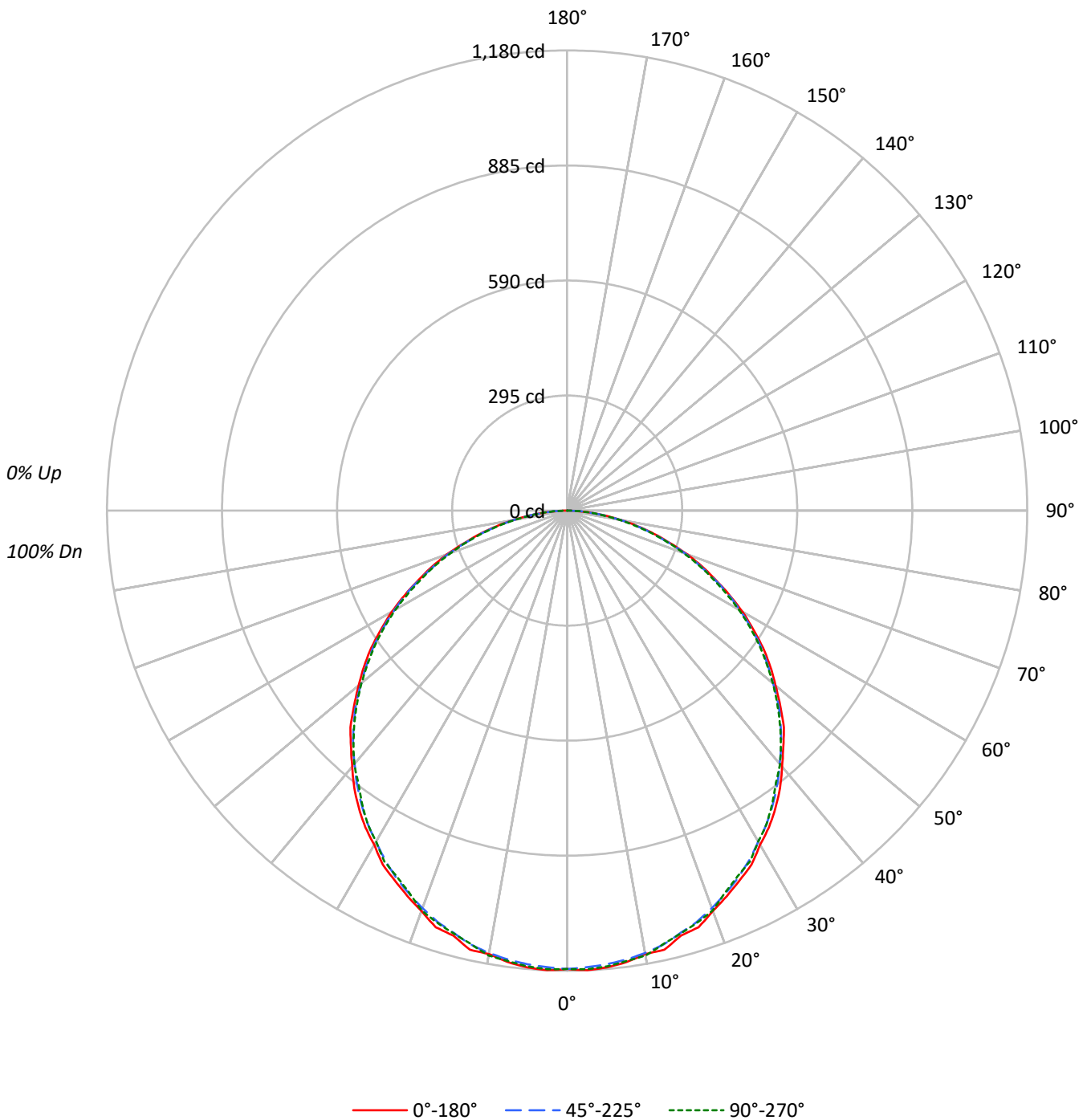
Lumens per Lamp: N/A
Luminaire Lumens: 3344.1 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 30.9423397771157
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 | 98 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 83 |
| 2 | 99 | 90 | 83 | 78 | 96 | 88 | 82 | 77 | 85 | 79 | 75 | 82 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 66 | 62 | 69 | 65 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 69 | 60 | 54 | 66 | 59 | 53 | 64 | 58 | 53 | 62 | 56 | 52 | 50 |
| 5 | 76 | 63 | 54 | 47 | 73 | 61 | 53 | 47 | 59 | 52 | 46 | 57 | 51 | 46 | 55 | 50 | 45 | 43 |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 41 | 54 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 40 | 37 |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 36 | 47 | 40 | 35 | 46 | 40 | 35 | 33 |
| 8 | 60 | 47 | 38 | 32 | 59 | 46 | 38 | 32 | 45 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 31 | 29 |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 28 | 27 |
| 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° | 3164 | 3164 | 3164 |
| 5° | 3176 | 3155 | 3169 |
| 10° | 3155 | 3148 | 3166 |
| 15° | 3143 | 3125 | 3128 |
| 20° | 3129 | 3106 | 3125 |
| 25° | 3107 | 3083 | 3071 |
| 30° | 3075 | 3046 | 3046 |
| 35° | 3060 | 3021 | 3012 |
| 40° | 3012 | 2979 | 2984 |
| 45° | 2991 | 2946 | 2936 |
| 50° | 2920 | 2887 | 2882 |
| 55° | 2876 | 2838 | 2820 |
| 60° | 2794 | 2759 | 2737 |
| 65° | 2675 | 2649 | 2616 |
| 70° | 2578 | 2536 | 2495 |
| 75° | 2404 | 2362 | 2335 |
| 80° | 2170 | 2129 | 2087 |
| 85° | 1834 | 1794 | 1754 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 111.2 | 3.3 |
| 10°-20° | 317.8 | 9.5 |
| 20°-30° | 479.6 | 14.3 |
| 30°-40° | 576.6 | 17.2 |
| 40°-50° | 597.5 | 17.9 |
| 50°-60° | 540.5 | 16.2 |
| 60°-70° | 412.5 | 12.3 |
| 70°-80° | 240.5 | 7.2 |
| 80°-90° | 68.0 | 2.0 |
| 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° | 908.5 | 27.2 |
| 0°-40° | 1485.1 | 44.4 |
| 0°-60° | 2623.1 | 78.4 |
| 0°-90° | 3344.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3344.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1176 | 1176 | 1176 | 1176 | 1176 | |
| 5° | 1176 | 1172 | 1168 | 1168 | 1173 | 112 |
| 15° | 1128 | 1127 | 1122 | 1124 | 1123 | 320 |
| 25° | 1046 | 1046 | 1038 | 1038 | 1034 | 482 |
| 35° | 931 | 925 | 920 | 918 | 917 | 582 |
| 45° | 786 | 777 | 774 | 770 | 772 | 603 |
| 55° | 613 | 609 | 605 | 602 | 601 | 546 |
| 65° | 420 | 420 | 416 | 415 | 411 | 417 |
| 75° | 231 | 230 | 227 | 223 | 225 | 244 |
| 85° | 59 | 62 | 58 | 59 | 57 | 69 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1175.7 | 1175.7 | 1175.7 | 1175.7 | 1175.7 |
| 2.5° | 1179.7 | 1173.1 | 1171.8 | 1174.4 | 1177.1 |
| 5° | 1175.7 | 1171.8 | 1167.8 | 1167.8 | 1173.1 |
| 7.5° | 1167.8 | 1163.9 | 1161.2 | 1161.2 | 1165.2 |
| 10° | 1154.6 | 1150.6 | 1152.0 | 1152.0 | 1158.6 |
| 12.5° | 1153.3 | 1141.4 | 1140.1 | 1141.4 | 1138.8 |
| 15° | 1128.2 | 1126.9 | 1121.6 | 1124.2 | 1122.9 |
| 17.5° | 1120.3 | 1112.3 | 1105.7 | 1107.1 | 1108.4 |
| 20° | 1092.5 | 1089.9 | 1084.6 | 1085.9 | 1091.2 |
| 22.5° | 1070.1 | 1071.4 | 1062.1 | 1062.1 | 1059.5 |
| 25° | 1046.3 | 1046.3 | 1038.4 | 1038.4 | 1034.4 |
| 27.5° | 1023.8 | 1017.2 | 1010.6 | 1011.9 | 1014.6 |
| 30° | 989.5 | 986.8 | 980.2 | 981.6 | 980.2 |
| 32.5° | 963.1 | 961.7 | 952.5 | 949.8 | 952.5 |
| 35° | 931.4 | 924.7 | 919.5 | 918.1 | 916.8 |
| 37.5° | 897.0 | 891.7 | 885.1 | 883.8 | 879.8 |
| 40° | 857.4 | 856.1 | 848.1 | 849.4 | 849.4 |
| 42.5° | 820.4 | 816.4 | 812.5 | 809.8 | 811.1 |
| 45° | 786.0 | 776.8 | 774.1 | 770.2 | 771.5 |
| 47.5° | 741.1 | 737.2 | 734.5 | 729.2 | 730.5 |
| 50° | 697.5 | 697.5 | 689.6 | 688.3 | 688.3 |
| 52.5° | 656.6 | 653.9 | 647.3 | 648.6 | 644.7 |
| 55° | 613.0 | 609.0 | 605.0 | 602.4 | 601.1 |
| 57.5° | 565.4 | 561.5 | 558.8 | 554.8 | 554.8 |
| 60° | 519.2 | 513.9 | 512.6 | 507.3 | 508.6 |
| 62.5° | 469.0 | 467.7 | 466.3 | 462.4 | 458.4 |
| 65° | 420.1 | 420.1 | 416.1 | 414.8 | 410.9 |
| 67.5° | 373.9 | 371.2 | 367.3 | 367.3 | 364.6 |
| 70° | 327.6 | 323.7 | 322.3 | 318.4 | 317.1 |
| 72.5° | 276.1 | 276.1 | 272.1 | 270.8 | 270.8 |
| 75° | 231.2 | 229.9 | 227.2 | 223.3 | 224.6 |
| 77.5° | 184.9 | 183.6 | 182.3 | 179.7 | 178.3 |
| 80° | 140.0 | 140.0 | 137.4 | 138.7 | 134.7 |
| 82.5° | 97.8 | 99.1 | 96.4 | 96.4 | 93.8 |
| 85° | 59.4 | 62.1 | 58.1 | 59.4 | 56.8 |
| 87.5° | 25.1 | 25.1 | 23.8 | 23.8 | 23.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)