

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: P298498

Luminaire Tested: **22FPX-21-347-L835-SWPD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P298498
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-21-347-L835-SWPD1
Description: 2x2 FPX SERIES LED PANEL, 3500K CCT AND 80CRI
Light Source: -
Ballast/Driver: -

Summary

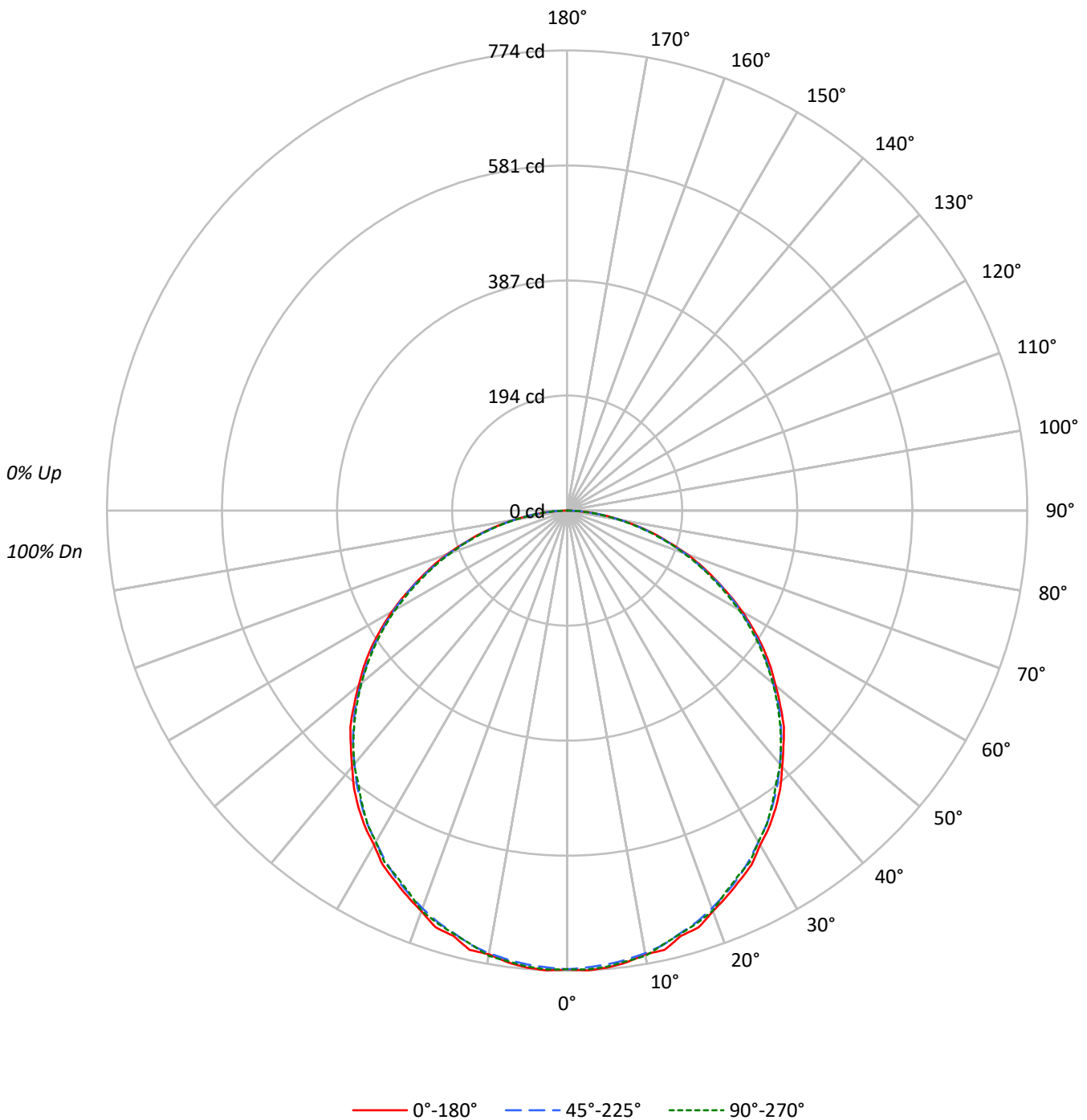
Lumens per Lamp: N/A
Luminaire Lumens: 2194.5 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 20.6
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 | 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° | 2076 | 2076 | 2076 |
| 5° | 2084 | 2070 | 2080 |
| 10° | 2070 | 2066 | 2078 |
| 15° | 2063 | 2050 | 2053 |
| 20° | 2053 | 2038 | 2051 |
| 25° | 2039 | 2023 | 2015 |
| 30° | 2018 | 1999 | 1999 |
| 35° | 2008 | 1982 | 1977 |
| 40° | 1977 | 1955 | 1958 |
| 45° | 1963 | 1933 | 1927 |
| 50° | 1916 | 1894 | 1891 |
| 55° | 1887 | 1863 | 1851 |
| 60° | 1834 | 1810 | 1796 |
| 65° | 1755 | 1739 | 1717 |
| 70° | 1692 | 1664 | 1637 |
| 75° | 1577 | 1550 | 1533 |
| 80° | 1424 | 1398 | 1370 |
| 85° | 1204 | 1176 | 1152 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 73.0 | 3.3 |
| 10°-20° | 208.5 | 9.5 |
| 20°-30° | 314.7 | 14.3 |
| 30°-40° | 378.4 | 17.2 |
| 40°-50° | 392.1 | 17.9 |
| 50°-60° | 354.7 | 16.2 |
| 60°-70° | 270.7 | 12.3 |
| 70°-80° | 157.8 | 7.2 |
| 80°-90° | 44.6 | 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° | 596.2 | 27.2 |
| 0°-40° | 974.6 | 44.4 |
| 0°-60° | 1721.4 | 78.4 |
| 0°-90° | 2194.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2194.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 772 | 772 | 772 | 772 | 772 | |
| 5° | 772 | 769 | 766 | 766 | 770 | 73 |
| 15° | 740 | 740 | 736 | 738 | 737 | 210 |
| 25° | 687 | 687 | 681 | 681 | 679 | 317 |
| 35° | 611 | 607 | 603 | 602 | 602 | 382 |
| 45° | 516 | 510 | 508 | 505 | 506 | 396 |
| 55° | 402 | 400 | 397 | 395 | 394 | 359 |
| 65° | 276 | 276 | 273 | 272 | 270 | 274 |
| 75° | 152 | 151 | 149 | 146 | 147 | 160 |
| 85° | 39 | 41 | 38 | 39 | 37 | 45 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 771.6 | 771.6 | 771.6 | 771.6 | 771.6 |
| 2.5° | 774.2 | 769.9 | 769.0 | 770.7 | 772.5 |
| 5° | 771.6 | 769.0 | 766.4 | 766.4 | 769.9 |
| 7.5° | 766.4 | 763.8 | 762.0 | 762.0 | 764.6 |
| 10° | 757.7 | 755.1 | 756.0 | 756.0 | 760.3 |
| 12.5° | 756.8 | 749.0 | 748.2 | 749.0 | 747.3 |
| 15° | 740.4 | 739.5 | 736.0 | 737.8 | 736.9 |
| 17.5° | 735.2 | 730.0 | 725.6 | 726.5 | 727.4 |
| 20° | 717.0 | 715.2 | 711.8 | 712.6 | 716.1 |
| 22.5° | 702.2 | 703.1 | 697.0 | 697.0 | 695.3 |
| 25° | 686.6 | 686.6 | 681.4 | 681.4 | 678.8 |
| 27.5° | 671.9 | 667.6 | 663.2 | 664.1 | 665.8 |
| 30° | 649.3 | 647.6 | 643.3 | 644.1 | 643.3 |
| 32.5° | 632.0 | 631.1 | 625.1 | 623.3 | 625.1 |
| 35° | 611.2 | 606.9 | 603.4 | 602.5 | 601.7 |
| 37.5° | 588.7 | 585.2 | 580.9 | 580.0 | 577.4 |
| 40° | 562.7 | 561.8 | 556.6 | 557.4 | 557.4 |
| 42.5° | 538.4 | 535.8 | 533.2 | 531.4 | 532.3 |
| 45° | 515.8 | 509.8 | 508.0 | 505.4 | 506.3 |
| 47.5° | 486.4 | 483.8 | 482.0 | 478.6 | 479.4 |
| 50° | 457.7 | 457.7 | 452.5 | 451.7 | 451.7 |
| 52.5° | 430.9 | 429.1 | 424.8 | 425.7 | 423.1 |
| 55° | 402.3 | 399.7 | 397.1 | 395.3 | 394.5 |
| 57.5° | 371.1 | 368.5 | 366.7 | 364.1 | 364.1 |
| 60° | 340.7 | 337.2 | 336.4 | 332.9 | 333.8 |
| 62.5° | 307.8 | 306.9 | 306.0 | 303.4 | 300.8 |
| 65° | 275.7 | 275.7 | 273.1 | 272.2 | 269.6 |
| 67.5° | 245.3 | 243.6 | 241.0 | 241.0 | 239.3 |
| 70° | 215.0 | 212.4 | 211.5 | 208.9 | 208.1 |
| 72.5° | 181.2 | 181.2 | 178.6 | 177.7 | 177.7 |
| 75° | 151.7 | 150.8 | 149.1 | 146.5 | 147.4 |
| 77.5° | 121.4 | 120.5 | 119.6 | 117.9 | 117.0 |
| 80° | 91.9 | 91.9 | 90.2 | 91.0 | 88.4 |
| 82.5° | 64.2 | 65.0 | 63.3 | 63.3 | 61.6 |
| 85° | 39.0 | 40.7 | 38.1 | 39.0 | 37.3 |
| 87.5° | 16.5 | 16.5 | 15.6 | 15.6 | 15.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)