

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: P298712

Luminaire Tested: **24FPX-64-347-L840-SWPD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P298712
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-64-347-L840-SWPD1
Description: 2x4 FPX SERIES LED PANEL, 4000K CCT AND 80CRI
Light Source: -
Ballast/Driver: -

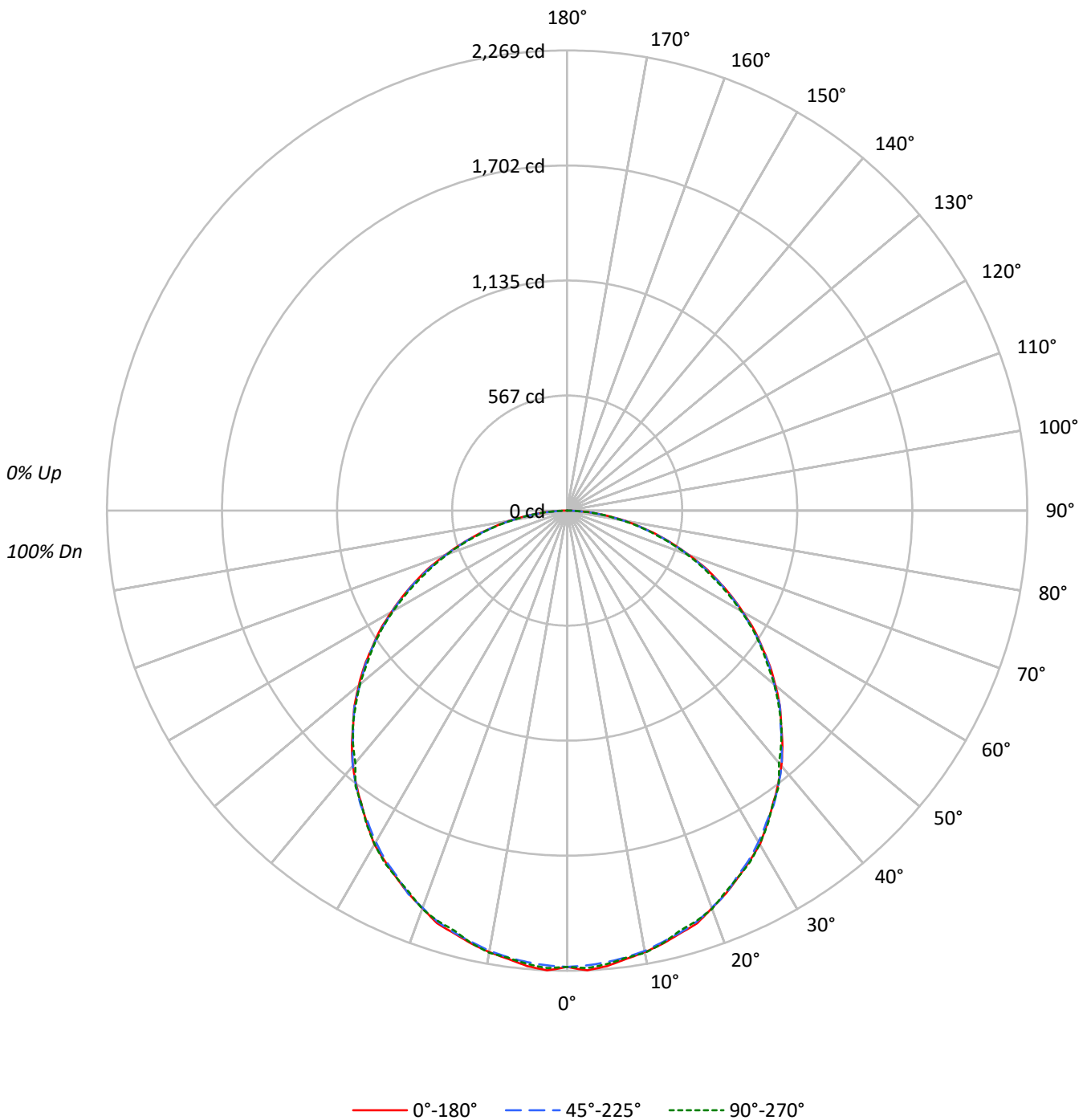
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6471.9 lumens
Efficiency: N/A
Efficacy: 111.7 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): 57.96
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° | 3028 | 3028 | 3028 |
| 5° | 3045 | 3019 | 3032 |
| 10° | 3020 | 3013 | 3026 |
| 15° | 3006 | 3000 | 2987 |
| 20° | 2987 | 2984 | 2992 |
| 25° | 2962 | 2951 | 2962 |
| 30° | 2953 | 2932 | 2950 |
| 35° | 2904 | 2914 | 2904 |
| 40° | 2886 | 2890 | 2853 |
| 45° | 2839 | 2832 | 2843 |
| 50° | 2807 | 2791 | 2791 |
| 55° | 2750 | 2746 | 2733 |
| 60° | 2692 | 2682 | 2661 |
| 65° | 2619 | 2607 | 2559 |
| 70° | 2515 | 2492 | 2462 |
| 75° | 2389 | 2350 | 2310 |
| 80° | 2227 | 2154 | 2125 |
| 85° | 1956 | 1868 | 1839 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 212.6 | 3.3 |
| 10°-20° | 607.5 | 9.4 |
| 20°-30° | 920.0 | 14.2 |
| 30°-40° | 1108.5 | 17.1 |
| 40°-50° | 1152.6 | 17.8 |
| 50°-60° | 1046.0 | 16.2 |
| 60°-70° | 807.5 | 12.5 |
| 70°-80° | 478.3 | 7.4 |
| 80°-90° | 138.9 | 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° | 1740.0 | 26.9 |
| 0°-40° | 2848.5 | 44.0 |
| 0°-60° | 5047.1 | 78.0 |
| 0°-90° | 6471.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6471.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2250 | 2250 | 2250 | 2250 | 2250 | |
| 5° | 2254 | 2243 | 2235 | 2230 | 2245 | 214 |
| 15° | 2158 | 2148 | 2154 | 2150 | 2144 | 610 |
| 25° | 1995 | 1997 | 1988 | 1989 | 1995 | 921 |
| 35° | 1768 | 1770 | 1774 | 1772 | 1768 | 1109 |
| 45° | 1492 | 1496 | 1488 | 1492 | 1494 | 1154 |
| 55° | 1172 | 1176 | 1171 | 1169 | 1165 | 1051 |
| 65° | 823 | 823 | 819 | 811 | 804 | 815 |
| 75° | 460 | 456 | 452 | 448 | 444 | 485 |
| 85° | 127 | 121 | 121 | 119 | 119 | 144 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P298712

CATALOG NUMBER: 24FPX-64-347-L840-SWPD1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2250.4 | 2250.4 | 2250.4 | 2250.4 | 2250.4 |
| 2.5° | 2269.3 | 2240.9 | 2244.7 | 2237.2 | 2258.0 |
| 5° | 2254.2 | 2242.8 | 2235.3 | 2229.6 | 2244.7 |
| 7.5° | 2229.6 | 2220.1 | 2222.0 | 2220.1 | 2223.9 |
| 10° | 2210.7 | 2210.7 | 2205.0 | 2199.3 | 2214.5 |
| 12.5° | 2186.1 | 2186.1 | 2178.5 | 2172.9 | 2184.2 |
| 15° | 2157.7 | 2148.3 | 2153.9 | 2150.2 | 2144.5 |
| 17.5° | 2133.1 | 2121.8 | 2125.6 | 2108.6 | 2121.8 |
| 20° | 2085.9 | 2082.1 | 2084.0 | 2074.5 | 2089.6 |
| 22.5° | 2044.3 | 2049.9 | 2046.2 | 2042.4 | 2036.7 |
| 25° | 1995.1 | 1997.0 | 1987.5 | 1989.4 | 1995.1 |
| 27.5° | 1947.8 | 1953.5 | 1942.1 | 1942.1 | 1953.5 |
| 30° | 1900.5 | 1893.0 | 1887.3 | 1898.6 | 1898.6 |
| 32.5° | 1834.4 | 1826.8 | 1826.8 | 1832.5 | 1838.1 |
| 35° | 1768.2 | 1770.1 | 1773.8 | 1771.9 | 1768.2 |
| 37.5° | 1707.6 | 1703.9 | 1709.5 | 1709.5 | 1713.3 |
| 40° | 1643.4 | 1647.1 | 1645.2 | 1637.7 | 1624.4 |
| 42.5° | 1571.5 | 1575.3 | 1565.8 | 1575.3 | 1562.0 |
| 45° | 1492.1 | 1495.8 | 1488.3 | 1492.1 | 1494.0 |
| 47.5° | 1422.1 | 1418.3 | 1422.1 | 1416.4 | 1412.6 |
| 50° | 1340.8 | 1338.9 | 1333.2 | 1333.2 | 1333.2 |
| 52.5° | 1261.4 | 1255.7 | 1255.7 | 1255.7 | 1244.3 |
| 55° | 1172.5 | 1176.3 | 1170.6 | 1168.7 | 1164.9 |
| 57.5° | 1093.0 | 1085.5 | 1083.6 | 1083.6 | 1081.7 |
| 60° | 1000.4 | 998.5 | 996.6 | 992.8 | 989.0 |
| 62.5° | 913.4 | 905.8 | 907.7 | 903.9 | 898.3 |
| 65° | 822.6 | 822.6 | 818.8 | 811.3 | 803.7 |
| 67.5° | 735.6 | 731.8 | 726.2 | 722.4 | 714.8 |
| 70° | 639.2 | 637.3 | 633.5 | 629.7 | 625.9 |
| 72.5° | 546.5 | 544.6 | 542.7 | 539.0 | 535.2 |
| 75° | 459.5 | 455.8 | 452.0 | 448.2 | 444.4 |
| 77.5° | 368.8 | 366.9 | 365.0 | 359.3 | 359.3 |
| 80° | 287.4 | 281.8 | 278.0 | 276.1 | 274.2 |
| 82.5° | 202.3 | 202.3 | 198.6 | 196.7 | 196.7 |
| 85° | 126.7 | 121.0 | 121.0 | 119.1 | 119.1 |
| 87.5° | 54.8 | 53.0 | 49.2 | 49.2 | 49.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)