

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: P298641

Luminaire Tested: **14FPX-42-L850-5LTHD-SWPD1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P298641
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1903-179-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14FPX-42-L850-5LTHD-SWPD1
Description: 1x4 FPX SERIES LED PANEL, 5000K CCT AND 80CRI
Light Source: -
Ballast/Driver: -

Summary

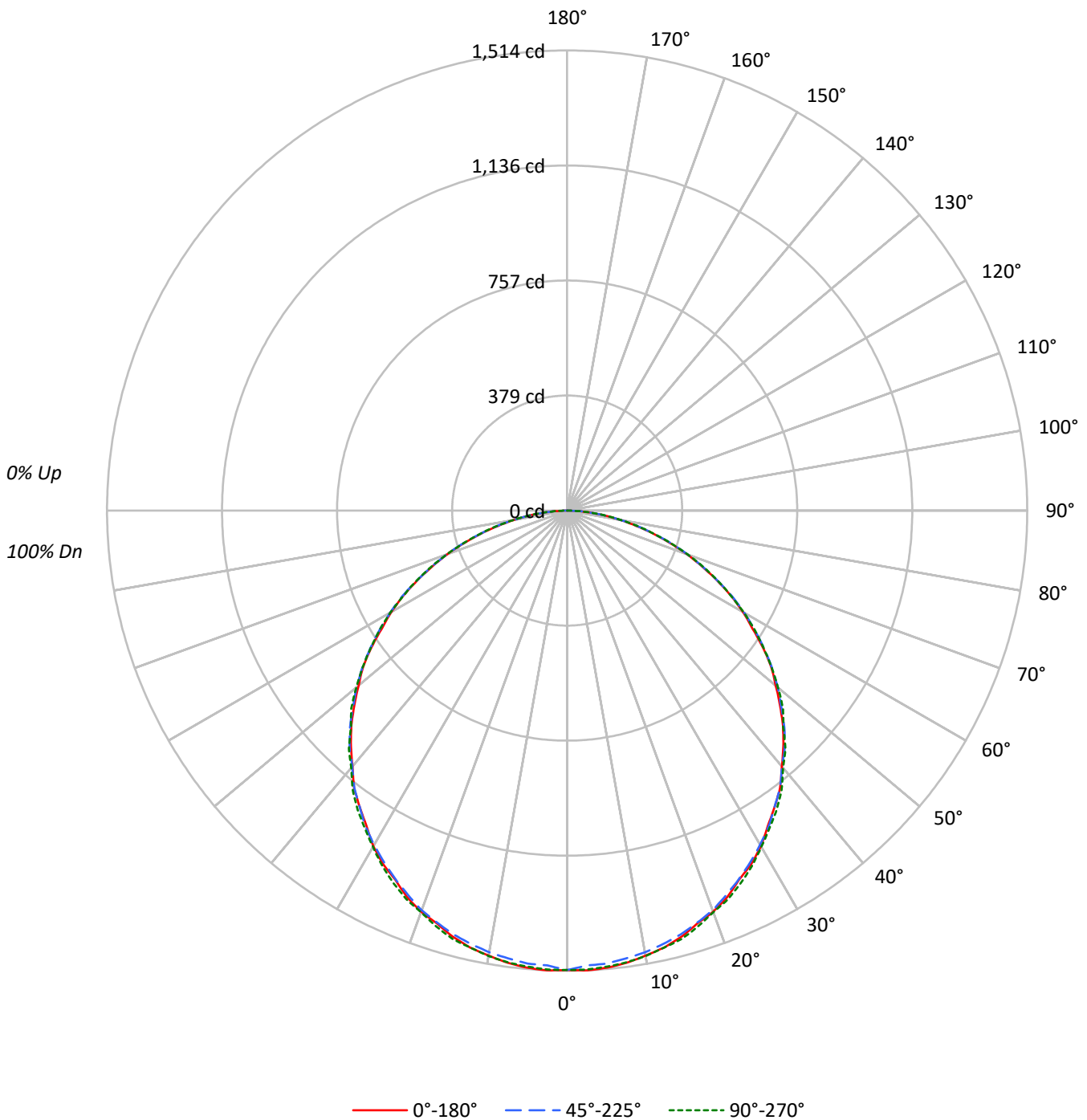
Lumens per Lamp: N/A
Luminaire Lumens: 4346.7 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.2906358104003
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 | 91 | 88 | 90 | 87 | 85 | 83 |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 77 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 69 | 60 | 54 | 66 | 59 | 53 | 64 | 58 | 52 | 62 | 56 | 52 | 50 |
| 5 | 75 | 62 | 53 | 47 | 73 | 61 | 53 | 46 | 59 | 52 | 46 | 57 | 51 | 45 | 55 | 50 | 45 | 43 |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 41 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 35 | 47 | 40 | 35 | 46 | 40 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 59 | 46 | 38 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 29 | 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° | 4067 | 4067 | 4067 |
| 5° | 4078 | 4041 | 4068 |
| 10° | 4063 | 4031 | 4066 |
| 15° | 4045 | 4022 | 4065 |
| 20° | 4023 | 4007 | 4028 |
| 25° | 3977 | 3972 | 4015 |
| 30° | 3962 | 3945 | 3971 |
| 35° | 3909 | 3909 | 3948 |
| 40° | 3859 | 3862 | 3881 |
| 45° | 3822 | 3846 | 3826 |
| 50° | 3750 | 3784 | 3792 |
| 55° | 3692 | 3709 | 3705 |
| 60° | 3597 | 3622 | 3617 |
| 65° | 3466 | 3477 | 3489 |
| 70° | 3299 | 3306 | 3313 |
| 75° | 3051 | 3079 | 3089 |
| 80° | 2737 | 2779 | 2793 |
| 85° | 2238 | 2350 | 2405 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 142.8 | 3.3 |
| 10°-20° | 409.0 | 9.4 |
| 20°-30° | 619.7 | 14.3 |
| 30°-40° | 747.6 | 17.2 |
| 40°-50° | 778.7 | 17.9 |
| 50°-60° | 706.4 | 16.3 |
| 60°-70° | 540.7 | 12.4 |
| 70°-80° | 313.9 | 7.2 |
| 80°-90° | 87.9 | 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° | 1171.5 | 27.0 |
| 0°-40° | 1919.1 | 44.2 |
| 0°-60° | 3404.2 | 78.3 |
| 0°-90° | 4346.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4346.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1512 | 1512 | 1512 | 1512 | 1512 | |
| 5° | 1510 | 1504 | 1496 | 1504 | 1506 | 143 |
| 15° | 1452 | 1448 | 1444 | 1452 | 1459 | 409 |
| 25° | 1340 | 1343 | 1338 | 1348 | 1352 | 619 |
| 35° | 1190 | 1194 | 1190 | 1197 | 1202 | 745 |
| 45° | 1004 | 1012 | 1011 | 1015 | 1005 | 773 |
| 55° | 787 | 792 | 791 | 792 | 790 | 702 |
| 65° | 544 | 546 | 546 | 547 | 548 | 539 |
| 75° | 293 | 294 | 296 | 299 | 297 | 311 |
| 85° | 72 | 73 | 76 | 78 | 78 | 86 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 |
| 2.5° | 1514.3 | 1506.1 | 1498.0 | 1510.6 | 1511.5 |
| 5° | 1509.7 | 1504.3 | 1496.1 | 1504.3 | 1506.1 |
| 7.5° | 1500.7 | 1493.4 | 1486.2 | 1499.8 | 1498.9 |
| 10° | 1487.1 | 1484.4 | 1475.3 | 1485.3 | 1488.0 |
| 12.5° | 1472.6 | 1468.1 | 1460.8 | 1468.1 | 1472.6 |
| 15° | 1451.8 | 1448.1 | 1443.6 | 1451.8 | 1459.0 |
| 17.5° | 1424.6 | 1426.4 | 1421.9 | 1430.9 | 1433.7 |
| 20° | 1404.7 | 1402.0 | 1399.2 | 1406.5 | 1406.5 |
| 22.5° | 1376.6 | 1379.3 | 1368.4 | 1381.1 | 1383.8 |
| 25° | 1339.5 | 1343.1 | 1337.7 | 1348.5 | 1352.1 |
| 27.5° | 1311.4 | 1311.4 | 1305.0 | 1313.2 | 1317.7 |
| 30° | 1275.2 | 1274.3 | 1269.7 | 1275.2 | 1277.9 |
| 32.5° | 1229.0 | 1238.9 | 1233.5 | 1241.7 | 1238.9 |
| 35° | 1190.0 | 1193.7 | 1190.0 | 1197.3 | 1201.8 |
| 37.5° | 1151.1 | 1152.9 | 1150.2 | 1154.7 | 1159.2 |
| 40° | 1098.6 | 1104.9 | 1099.5 | 1107.6 | 1104.9 |
| 42.5° | 1053.3 | 1059.6 | 1059.6 | 1061.4 | 1063.2 |
| 45° | 1004.4 | 1011.6 | 1010.7 | 1015.2 | 1005.3 |
| 47.5° | 950.0 | 960.0 | 955.5 | 964.5 | 963.6 |
| 50° | 895.7 | 906.6 | 903.8 | 902.0 | 905.7 |
| 52.5° | 846.8 | 850.4 | 849.5 | 849.5 | 848.6 |
| 55° | 787.0 | 791.5 | 790.6 | 792.4 | 789.7 |
| 57.5° | 723.6 | 732.7 | 731.8 | 731.8 | 731.8 |
| 60° | 668.4 | 672.0 | 672.9 | 672.0 | 672.0 |
| 62.5° | 608.6 | 610.4 | 612.2 | 607.7 | 607.7 |
| 65° | 544.3 | 546.1 | 546.1 | 547.0 | 547.9 |
| 67.5° | 480.0 | 485.4 | 482.7 | 482.7 | 485.4 |
| 70° | 419.3 | 420.2 | 420.2 | 420.2 | 421.1 |
| 72.5° | 354.1 | 355.9 | 359.5 | 360.5 | 357.7 |
| 75° | 293.4 | 294.3 | 296.1 | 298.9 | 297.1 |
| 77.5° | 232.8 | 234.6 | 237.3 | 238.2 | 239.1 |
| 80° | 176.6 | 178.4 | 179.3 | 182.0 | 180.2 |
| 82.5° | 125.0 | 125.9 | 125.9 | 127.7 | 128.6 |
| 85° | 72.5 | 73.4 | 76.1 | 77.9 | 77.9 |
| 87.5° | 30.8 | 31.7 | 30.8 | 30.8 | 31.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)