

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: P#

Luminaire Tested: **4ILED-LD5-7-W-ASYWG-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34184)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4ILED-LD5-7-W-ASYWG-UNV-L850-CD1-U
Description: Metalux 4' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER-HEAVY DUTY WIREGUARD DISTRIBUTION

Light Source: (1) 5000 CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

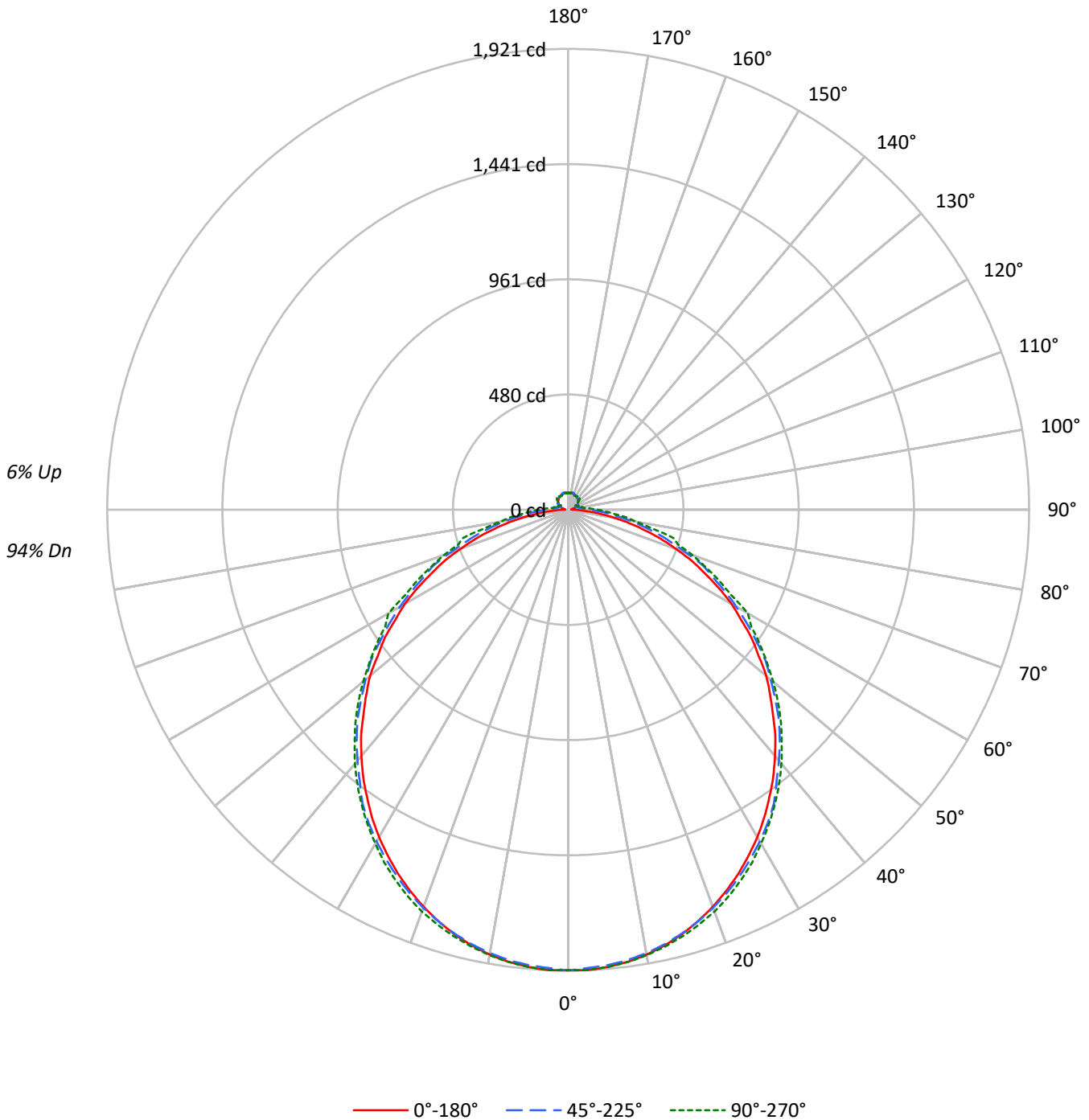
Lumens per Lamp: N/A
Luminaire Lumens: 5786.0 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 50.4
Input Voltage (V):
Input Current (A_{in}): 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



TEST NUMBER: P#
CATALOG NUMBER: 4ILED-LD5-7-W-ASYWG-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-7-W-ASYWG-UNV-L850-CD1-U

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 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | | 102 | 102 | 102 | | 97 | 97 | 97 | 94 |
| 1 | 107 | 102 | 98 | 94 | 104 | 99 | 95 | 91 | 94 | 91 | 87 | | 89 | 86 | 84 | | 84 | 82 | 80 | 78 |
| 2 | 97 | 89 | 82 | 76 | 94 | 86 | 80 | 75 | 82 | 76 | 72 | | 78 | 73 | 69 | | 74 | 70 | 67 | 65 |
| 3 | 88 | 78 | 70 | 63 | 85 | 76 | 68 | 62 | 72 | 66 | 60 | | 68 | 63 | 58 | | 65 | 61 | 57 | 54 |
| 4 | 81 | 69 | 60 | 53 | 78 | 67 | 59 | 53 | 64 | 57 | 51 | | 61 | 55 | 50 | | 58 | 53 | 49 | 46 |
| 5 | 74 | 62 | 52 | 46 | 72 | 60 | 52 | 45 | 57 | 50 | 44 | | 55 | 48 | 43 | | 52 | 47 | 42 | 40 |
| 6 | 69 | 55 | 46 | 40 | 66 | 54 | 46 | 40 | 52 | 44 | 39 | | 49 | 43 | 38 | | 47 | 42 | 37 | 35 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 47 | 40 | 34 | | 45 | 39 | 34 | | 43 | 37 | 33 | 31 |
| 8 | 59 | 46 | 37 | 31 | 57 | 45 | 37 | 31 | 43 | 36 | 31 | | 41 | 35 | 30 | | 40 | 34 | 30 | 28 |
| 9 | 55 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | | 38 | 32 | 27 | | 37 | 31 | 27 | 25 |
| 10 | 52 | 39 | 31 | 26 | 50 | 38 | 30 | 25 | 37 | 30 | 25 | | 35 | 29 | 25 | | 34 | 28 | 24 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5637 | 5637 | 5637 |
| 5° | 5624 | 5569 | 5583 |
| 10° | 5589 | 5503 | 5514 |
| 15° | 5532 | 5421 | 5436 |
| 20° | 5453 | 5332 | 5356 |
| 25° | 5365 | 5234 | 5250 |
| 30° | 5267 | 5130 | 5127 |
| 35° | 5149 | 5023 | 4997 |
| 40° | 5030 | 4847 | 4853 |
| 45° | 4888 | 4709 | 4691 |
| 50° | 4779 | 4521 | 4505 |
| 55° | 4614 | 4318 | 4312 |
| 60° | 4426 | 4078 | 4271 |
| 65° | 4146 | 3831 | 3879 |
| 70° | 3834 | 3546 | 3621 |
| 75° | 3427 | 3219 | 3660 |
| 80° | 2915 | 2886 | 2996 |
| 85° | 2303 | 2601 | 2809 |



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-7-W-ASYWG-UNV-L850-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 181.5 | 3.1 |
| 10°-20° | 517.5 | 8.9 |
| 20°-30° | 778.6 | 13.5 |
| 30°-40° | 930.6 | 16.1 |
| 40°-50° | 954.7 | 16.5 |
| 50°-60° | 856.7 | 14.8 |
| 60°-70° | 658.2 | 11.4 |
| 70°-80° | 402.8 | 7.0 |
| 80°-90° | 170.8 | 3.0 |
| 90°-100° | 60.1 | 1.0 |
| 100°-110° | 42.0 | 0.7 |
| 110°-120° | 39.2 | 0.7 |
| 120°-130° | 45.7 | 0.8 |
| 130°-140° | 48.4 | 0.8 |
| 140°-150° | 40.9 | 0.7 |
| 150°-160° | 31.2 | 0.5 |
| 160°-170° | 20.3 | 0.4 |
| 170°-180° | 6.8 | 0.1 |
| 0°-30° | 1477.6 | 25.5 |
| 0°-40° | 2408.2 | 41.6 |
| 0°-60° | 4219.5 | 72.9 |
| 0°-90° | 5451.3 | 94.2 |
| 90°-120° | 141.4 | 2.4 |
| 90°-150° | 276.4 | 4.8 |
| 90°-180° | 335.0 | 5.8 |
| 0°-180° | 5786.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1920 | 1920 | 1920 | 1920 | 1920 | |
| 5° | 1913 | 1913 | 1905 | 1913 | 1913 | 182 |
| 15° | 1832 | 1833 | 1829 | 1839 | 1841 | 516 |
| 25° | 1676 | 1679 | 1687 | 1702 | 1703 | 772 |
| 35° | 1462 | 1481 | 1495 | 1498 | 1501 | 915 |
| 45° | 1207 | 1228 | 1242 | 1251 | 1253 | 933 |
| 55° | 934 | 942 | 958 | 972 | 974 | 832 |
| 65° | 629 | 640 | 664 | 685 | 689 | 625 |
| 75° | 330 | 348 | 384 | 406 | 454 | 352 |
| 85° | 88 | 120 | 161 | 182 | 187 | 94 |
| 90° | 17 | 48 | 91 | 115 | 121 | 13 |
| 95° | 14 | 33 | 56 | 75 | 78 | 13 |
| 105° | 26 | 25 | 38 | 60 | 56 | 28 |
| 115° | 39 | 43 | 33 | 38 | 40 | 39 |
| 125° | 50 | 50 | 59 | 51 | 42 | 45 |
| 135° | 58 | 57 | 62 | 70 | 68 | 45 |
| 145° | 64 | 66 | 62 | 66 | 69 | 40 |
| 155° | 68 | 72 | 68 | 65 | 65 | 31 |
| 165° | 70 | 72 | 74 | 72 | 70 | 20 |
| 175° | 71 | 71 | 71 | 71 | 69 | 7 |
| 180° | 70 | 70 | 70 | 70 | 70 | |



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-7-W-ASYWG-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1920.2 | 1920.2 | 1920.2 | 1920.2 | 1920.2 |
| 2.5° | 1921.2 | 1920.2 | 1911.7 | 1918.1 | 1920.2 |
| 5° | 1912.8 | 1912.8 | 1905.4 | 1912.8 | 1912.8 |
| 7.5° | 1901.1 | 1900.1 | 1893.7 | 1900.1 | 1902.2 |
| 10° | 1883.1 | 1883.1 | 1876.8 | 1884.2 | 1885.2 |
| 12.5° | 1859.8 | 1860.9 | 1855.6 | 1863.0 | 1865.1 |
| 15° | 1832.3 | 1833.4 | 1829.1 | 1838.7 | 1840.8 |
| 17.5° | 1798.4 | 1800.6 | 1799.5 | 1810.1 | 1813.3 |
| 20° | 1761.4 | 1767.7 | 1765.6 | 1779.4 | 1782.6 |
| 22.5° | 1720.1 | 1724.3 | 1728.6 | 1743.4 | 1745.5 |
| 25° | 1675.7 | 1678.8 | 1687.3 | 1702.1 | 1703.2 |
| 27.5° | 1627.0 | 1635.4 | 1642.8 | 1654.5 | 1658.7 |
| 30° | 1576.2 | 1587.8 | 1596.3 | 1606.9 | 1607.9 |
| 32.5° | 1521.1 | 1537.0 | 1547.6 | 1552.9 | 1556.0 |
| 35° | 1461.8 | 1480.9 | 1494.6 | 1497.8 | 1501.0 |
| 37.5° | 1403.6 | 1423.7 | 1426.9 | 1441.7 | 1442.8 |
| 40° | 1340.1 | 1363.4 | 1365.5 | 1379.3 | 1382.4 |
| 42.5° | 1277.6 | 1290.4 | 1305.2 | 1317.9 | 1316.8 |
| 45° | 1206.7 | 1227.9 | 1241.7 | 1251.2 | 1253.3 |
| 47.5° | 1141.1 | 1165.4 | 1169.7 | 1181.3 | 1185.6 |
| 50° | 1077.6 | 1096.6 | 1101.9 | 1116.8 | 1114.6 |
| 52.5° | 1000.3 | 1021.5 | 1037.4 | 1042.7 | 1042.7 |
| 55° | 933.6 | 942.1 | 958.0 | 971.7 | 973.8 |
| 57.5° | 854.2 | 868.0 | 882.8 | 901.9 | 904.0 |
| 60° | 786.5 | 797.1 | 808.7 | 840.5 | 864.8 |
| 62.5° | 707.1 | 717.7 | 734.6 | 761.1 | 761.1 |
| 65° | 628.8 | 640.4 | 663.7 | 684.9 | 689.1 |
| 67.5° | 557.8 | 568.4 | 607.6 | 612.9 | 616.1 |
| 70° | 477.4 | 491.2 | 520.8 | 540.9 | 548.3 |
| 72.5° | 404.4 | 417.1 | 448.8 | 474.2 | 478.5 |
| 75° | 330.3 | 348.3 | 384.2 | 406.5 | 454.1 |
| 77.5° | 262.5 | 284.7 | 318.6 | 345.1 | 354.6 |
| 80° | 196.9 | 221.2 | 262.5 | 282.6 | 286.9 |
| 82.5° | 136.6 | 168.3 | 204.3 | 233.9 | 241.3 |
| 85° | 87.9 | 119.6 | 160.9 | 182.1 | 187.4 |
| 87.5° | 46.6 | 80.4 | 120.7 | 146.1 | 152.4 |
| 90° | 16.9 | 47.6 | 91.0 | 115.4 | 120.7 |
| 92.5° | 14.8 | 33.9 | 68.8 | 90.0 | 95.3 |
| 95° | 13.8 | 32.8 | 56.1 | 75.2 | 78.3 |
| 97.5° | 15.9 | 28.6 | 49.8 | 59.3 | 62.5 |
| 100° | 19.1 | 25.4 | 47.6 | 57.2 | 60.3 |
| 102.5° | 22.2 | 23.3 | 43.4 | 51.9 | 51.9 |
| 105° | 26.5 | 25.4 | 38.1 | 60.3 | 56.1 |
| 107.5° | 29.6 | 33.9 | 37.0 | 44.5 | 48.7 |
| 110° | 33.9 | 37.0 | 32.8 | 42.3 | 43.4 |



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-7-W-ASYWG-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 112.5° | 37.0 | 41.3 | 32.8 | 41.3 | 41.3 |
| 115° | 39.2 | 43.4 | 32.8 | 38.1 | 40.2 |
| 117.5° | 42.3 | 44.5 | 41.3 | 37.0 | 37.0 |
| 120° | 45.5 | 45.5 | 50.8 | 36.0 | 36.0 |
| 122.5° | 47.6 | 47.6 | 54.0 | 40.2 | 36.0 |
| 125° | 49.8 | 49.8 | 59.3 | 50.8 | 42.3 |
| 127.5° | 51.9 | 51.9 | 61.4 | 58.2 | 52.9 |
| 130° | 54.0 | 52.9 | 63.5 | 62.5 | 59.3 |
| 132.5° | 56.1 | 55.0 | 63.5 | 65.6 | 63.5 |
| 135° | 58.2 | 57.2 | 62.5 | 69.9 | 67.7 |
| 137.5° | 59.3 | 59.3 | 61.4 | 70.9 | 70.9 |
| 140° | 61.4 | 61.4 | 61.4 | 69.9 | 73.0 |
| 142.5° | 62.5 | 63.5 | 62.5 | 67.7 | 70.9 |
| 145° | 63.5 | 65.6 | 62.5 | 65.6 | 68.8 |
| 147.5° | 64.6 | 67.7 | 62.5 | 65.6 | 65.6 |
| 150° | 66.7 | 68.8 | 63.5 | 64.6 | 65.6 |
| 152.5° | 66.7 | 70.9 | 65.6 | 64.6 | 64.6 |
| 155° | 67.7 | 72.0 | 67.7 | 64.6 | 64.6 |
| 157.5° | 68.8 | 72.0 | 68.8 | 65.6 | 64.6 |
| 160° | 68.8 | 73.0 | 70.9 | 67.7 | 65.6 |
| 162.5° | 69.9 | 73.0 | 73.0 | 69.9 | 67.7 |
| 165° | 69.9 | 72.0 | 74.1 | 72.0 | 69.9 |
| 167.5° | 69.9 | 72.0 | 74.1 | 73.0 | 70.9 |
| 170° | 70.9 | 72.0 | 73.0 | 73.0 | 70.9 |
| 172.5° | 70.9 | 70.9 | 72.0 | 72.0 | 70.9 |
| 175° | 70.9 | 70.9 | 70.9 | 70.9 | 68.8 |
| 177.5° | 70.9 | 70.9 | 70.9 | 69.9 | 67.7 |
| 180° | 69.9 | 69.9 | 69.9 | 69.9 | 69.9 |

(END OF REPORT)