

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: **4SNLED-LD5-62HL-SLN-UNV-L940-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 (P27402)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-62HL-SLN-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

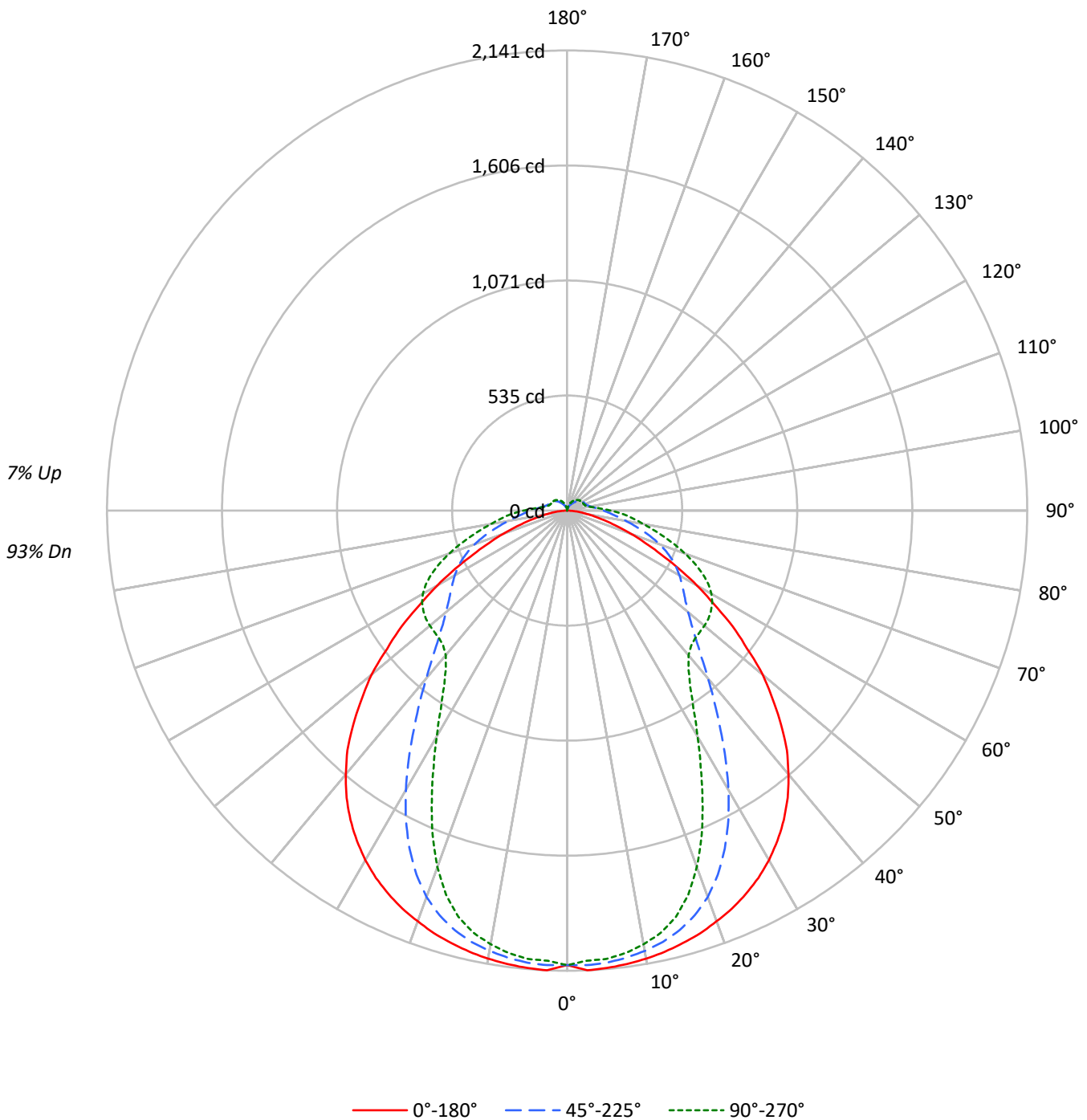
Lumens per Lamp: N/A
Luminaire Lumens: 5316.9 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 43
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





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-62HL-SLN-UNV-L940-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 | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 95 | 95 | 95 | 93 |
| 1 | 107 | 102 | 97 | 93 | 103 | 99 | 94 | 91 | 93 | 90 | 87 | 88 | 85 | 83 | 83 | 81 | 79 | 76 |
| 2 | 97 | 89 | 82 | 76 | 94 | 86 | 80 | 75 | 81 | 76 | 72 | 77 | 73 | 69 | 73 | 70 | 66 | 64 |
| 3 | 89 | 78 | 70 | 64 | 86 | 76 | 69 | 63 | 72 | 66 | 61 | 68 | 63 | 59 | 65 | 61 | 57 | 54 |
| 4 | 82 | 70 | 61 | 55 | 79 | 68 | 60 | 54 | 65 | 58 | 52 | 61 | 55 | 51 | 58 | 53 | 49 | 47 |
| 5 | 75 | 63 | 54 | 47 | 73 | 61 | 53 | 47 | 58 | 51 | 46 | 55 | 49 | 44 | 53 | 48 | 43 | 41 |
| 6 | 70 | 57 | 48 | 42 | 67 | 55 | 47 | 41 | 53 | 46 | 40 | 51 | 44 | 39 | 48 | 43 | 39 | 36 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 42 | 37 | 48 | 41 | 36 | 46 | 40 | 35 | 44 | 39 | 35 | 32 |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 39 | 33 | 44 | 37 | 32 | 43 | 36 | 32 | 41 | 35 | 31 | 29 |
| 9 | 57 | 44 | 36 | 30 | 55 | 43 | 35 | 30 | 41 | 34 | 29 | 40 | 33 | 29 | 38 | 33 | 28 | 27 |
| 10 | 53 | 40 | 33 | 28 | 52 | 40 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 35 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 17086 | 17086 | 17086 |
| 5° | 17282 | 16708 | 16446 |
| 10° | 17276 | 16247 | 15770 |
| 15° | 17282 | 15702 | 14870 |
| 20° | 17290 | 14893 | 13355 |
| 25° | 17297 | 13647 | 11309 |
| 30° | 17214 | 12008 | 9302 |
| 35° | 16969 | 10216 | 7795 |
| 40° | 16473 | 8652 | 7047 |
| 45° | 15600 | 7520 | 6994 |
| 50° | 14411 | 6875 | 7239 |
| 55° | 12690 | 6608 | 7492 |
| 60° | 10706 | 6513 | 7595 |
| 65° | 8613 | 6368 | 7358 |
| 70° | 6917 | 6040 | 6787 |
| 75° | 5215 | 5466 | 6022 |
| 80° | 3850 | 4909 | 5357 |
| 85° | 2576 | 4631 | 4928 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 200.0 | 3.8 |
| 10°-20° | 565.4 | 10.6 |
| 20°-30° | 790.3 | 14.9 |
| 30°-40° | 819.8 | 15.4 |
| 40°-50° | 757.3 | 14.2 |
| 50°-60° | 676.2 | 12.7 |
| 60°-70° | 548.0 | 10.3 |
| 70°-80° | 364.5 | 6.9 |
| 80°-90° | 208.7 | 3.9 |
| 90°-100° | 115.5 | 2.2 |
| 100°-110° | 78.2 | 1.5 |
| 110°-120° | 65.1 | 1.2 |
| 120°-130° | 52.9 | 1.0 |
| 130°-140° | 38.2 | 0.7 |
| 140°-150° | 23.0 | 0.4 |
| 150°-160° | 11.1 | 0.2 |
| 160°-170° | 2.9 | 0.1 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1555.7 | 29.3 |
| 0°-40° | 2375.5 | 44.7 |
| 0°-60° | 3809.0 | 71.6 |
| 0°-90° | 4930.2 | 92.7 |
| 90°-120° | 258.7 | 4.9 |
| 90°-150° | 372.9 | 7.0 |
| 90°-180° | 387.0 | 7.3 |
| 0°-180° | 5316.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2114 | 2114 | 2114 | 2114 | 2114 | |
| 5° | 2136 | 2100 | 2112 | 2097 | 2094 | 203 |
| 15° | 2083 | 2039 | 2021 | 1976 | 1956 | 589 |
| 25° | 1968 | 1881 | 1736 | 1554 | 1490 | 907 |
| 35° | 1758 | 1565 | 1244 | 1045 | 998 | 1097 |
| 45° | 1408 | 1116 | 847 | 817 | 842 | 1082 |
| 55° | 941 | 711 | 662 | 769 | 817 | 837 |
| 65° | 481 | 430 | 538 | 660 | 695 | 486 |
| 75° | 186 | 233 | 363 | 445 | 463 | 204 |
| 85° | 38 | 108 | 214 | 274 | 281 | 43 |
| 90° | 2 | 76 | 169 | 204 | 202 | 3 |
| 95° | 2 | 64 | 134 | 143 | 139 | 1 |
| 105° | 1 | 56 | 96 | 94 | 89 | 1 |
| 115° | 1 | 50 | 86 | 84 | 82 | 1 |
| 125° | 1 | 43 | 75 | 79 | 77 | 1 |
| 135° | 2 | 32 | 60 | 70 | 70 | 1 |
| 145° | 2 | 20 | 41 | 54 | 58 | 1 |
| 155° | 2 | 13 | 26 | 34 | 41 | 1 |
| 165° | 2 | 7 | 13 | 16 | 22 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-62HL-SLN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2114.3 | 2114.3 | 2114.3 | 2114.3 | 2114.3 |
| 2.5° | 2140.9 | 2106.0 | 2117.0 | 2107.8 | 2095.9 |
| 5° | 2136.3 | 2100.5 | 2111.5 | 2096.8 | 2094.0 |
| 7.5° | 2128.0 | 2092.2 | 2098.6 | 2081.2 | 2076.6 |
| 10° | 2117.0 | 2079.3 | 2080.3 | 2055.4 | 2049.0 |
| 12.5° | 2102.3 | 2061.0 | 2055.4 | 2021.4 | 2012.3 |
| 15° | 2083.0 | 2038.9 | 2021.4 | 1975.5 | 1956.2 |
| 17.5° | 2061.9 | 2010.4 | 1974.6 | 1903.8 | 1873.5 |
| 20° | 2033.4 | 1975.5 | 1913.0 | 1805.5 | 1765.1 |
| 22.5° | 2004.9 | 1933.2 | 1833.1 | 1689.7 | 1635.5 |
| 25° | 1968.2 | 1880.9 | 1735.7 | 1553.8 | 1490.4 |
| 27.5° | 1926.8 | 1819.3 | 1623.6 | 1414.1 | 1346.1 |
| 30° | 1878.1 | 1744.9 | 1500.5 | 1277.2 | 1212.9 |
| 32.5° | 1821.1 | 1661.3 | 1370.9 | 1154.1 | 1094.3 |
| 35° | 1757.7 | 1564.8 | 1244.1 | 1044.7 | 997.9 |
| 37.5° | 1685.2 | 1459.1 | 1126.5 | 956.5 | 926.2 |
| 40° | 1602.5 | 1344.3 | 1018.1 | 888.5 | 878.4 |
| 42.5° | 1513.3 | 1232.2 | 925.3 | 844.4 | 853.6 |
| 45° | 1407.7 | 1115.5 | 847.2 | 816.8 | 841.7 |
| 47.5° | 1296.5 | 1001.5 | 783.8 | 801.2 | 837.1 |
| 50° | 1189.0 | 895.9 | 734.2 | 791.1 | 833.4 |
| 52.5° | 1055.7 | 801.2 | 694.6 | 781.9 | 827.9 |
| 55° | 940.9 | 711.2 | 661.6 | 769.1 | 816.8 |
| 57.5° | 808.6 | 630.3 | 632.2 | 752.5 | 800.3 |
| 60° | 698.3 | 556.8 | 603.7 | 729.6 | 775.5 |
| 62.5° | 586.2 | 490.7 | 572.4 | 699.2 | 740.6 |
| 65° | 480.6 | 430.0 | 538.4 | 659.7 | 694.6 |
| 67.5° | 392.3 | 374.9 | 499.8 | 611.9 | 641.4 |
| 70° | 317.9 | 324.4 | 457.6 | 558.7 | 583.5 |
| 72.5° | 244.4 | 277.5 | 411.6 | 501.7 | 522.8 |
| 75° | 186.5 | 233.4 | 362.9 | 444.7 | 463.1 |
| 77.5° | 137.8 | 194.8 | 318.8 | 393.3 | 408.9 |
| 80° | 97.4 | 160.8 | 277.5 | 348.2 | 360.2 |
| 82.5° | 65.2 | 132.3 | 243.5 | 307.8 | 318.8 |
| 85° | 37.7 | 108.4 | 214.1 | 273.8 | 281.2 |
| 87.5° | 15.6 | 90.0 | 190.2 | 238.9 | 242.6 |
| 90° | 1.8 | 76.3 | 169.1 | 204.0 | 202.1 |
| 92.5° | 1.8 | 68.9 | 150.7 | 170.9 | 166.3 |
| 95° | 1.8 | 64.3 | 134.2 | 143.3 | 138.7 |
| 97.5° | 1.8 | 61.6 | 119.4 | 123.1 | 118.5 |
| 100° | 0.9 | 59.7 | 109.3 | 109.3 | 104.7 |
| 102.5° | 0.9 | 57.9 | 102.0 | 99.2 | 95.6 |
| 105° | 0.9 | 56.0 | 96.5 | 93.7 | 89.1 |
| 107.5° | 0.9 | 55.1 | 92.8 | 90.0 | 85.5 |
| 110° | 0.9 | 53.3 | 90.0 | 87.3 | 83.6 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-62HL-SLN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.9 | 52.4 | 88.2 | 86.4 | 81.8 |
| 115° | 0.9 | 50.5 | 85.5 | 84.5 | 81.8 |
| 117.5° | 0.9 | 48.7 | 83.6 | 83.6 | 80.9 |
| 120° | 0.9 | 46.9 | 80.9 | 82.7 | 79.9 |
| 122.5° | 0.9 | 45.0 | 78.1 | 80.9 | 78.1 |
| 125° | 0.9 | 43.2 | 75.3 | 79.0 | 77.2 |
| 127.5° | 1.8 | 40.4 | 71.7 | 77.2 | 75.3 |
| 130° | 0.9 | 37.7 | 68.0 | 75.3 | 74.4 |
| 132.5° | 1.8 | 34.9 | 64.3 | 72.6 | 72.6 |
| 135° | 1.8 | 32.2 | 59.7 | 69.8 | 69.8 |
| 137.5° | 1.8 | 28.5 | 55.1 | 66.2 | 67.1 |
| 140° | 1.8 | 25.7 | 50.5 | 62.5 | 64.3 |
| 142.5° | 1.8 | 23.0 | 45.9 | 58.8 | 61.6 |
| 145° | 1.8 | 20.2 | 41.3 | 54.2 | 57.9 |
| 147.5° | 1.8 | 18.4 | 36.8 | 48.7 | 54.2 |
| 150° | 1.8 | 15.6 | 33.1 | 44.1 | 49.6 |
| 152.5° | 1.8 | 13.8 | 29.4 | 39.5 | 45.9 |
| 155° | 1.8 | 12.9 | 25.7 | 34.0 | 41.3 |
| 157.5° | 1.8 | 11.0 | 22.1 | 29.4 | 36.8 |
| 160° | 1.8 | 9.2 | 18.4 | 25.7 | 31.2 |
| 162.5° | 1.8 | 8.3 | 15.6 | 21.1 | 27.6 |
| 165° | 1.8 | 7.4 | 12.9 | 16.5 | 22.1 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)