

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-LD5-70HL-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 (P27410)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-70HL-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
OPEN LED STIP
Light Source: -
Ballast/Driver: -

Summary

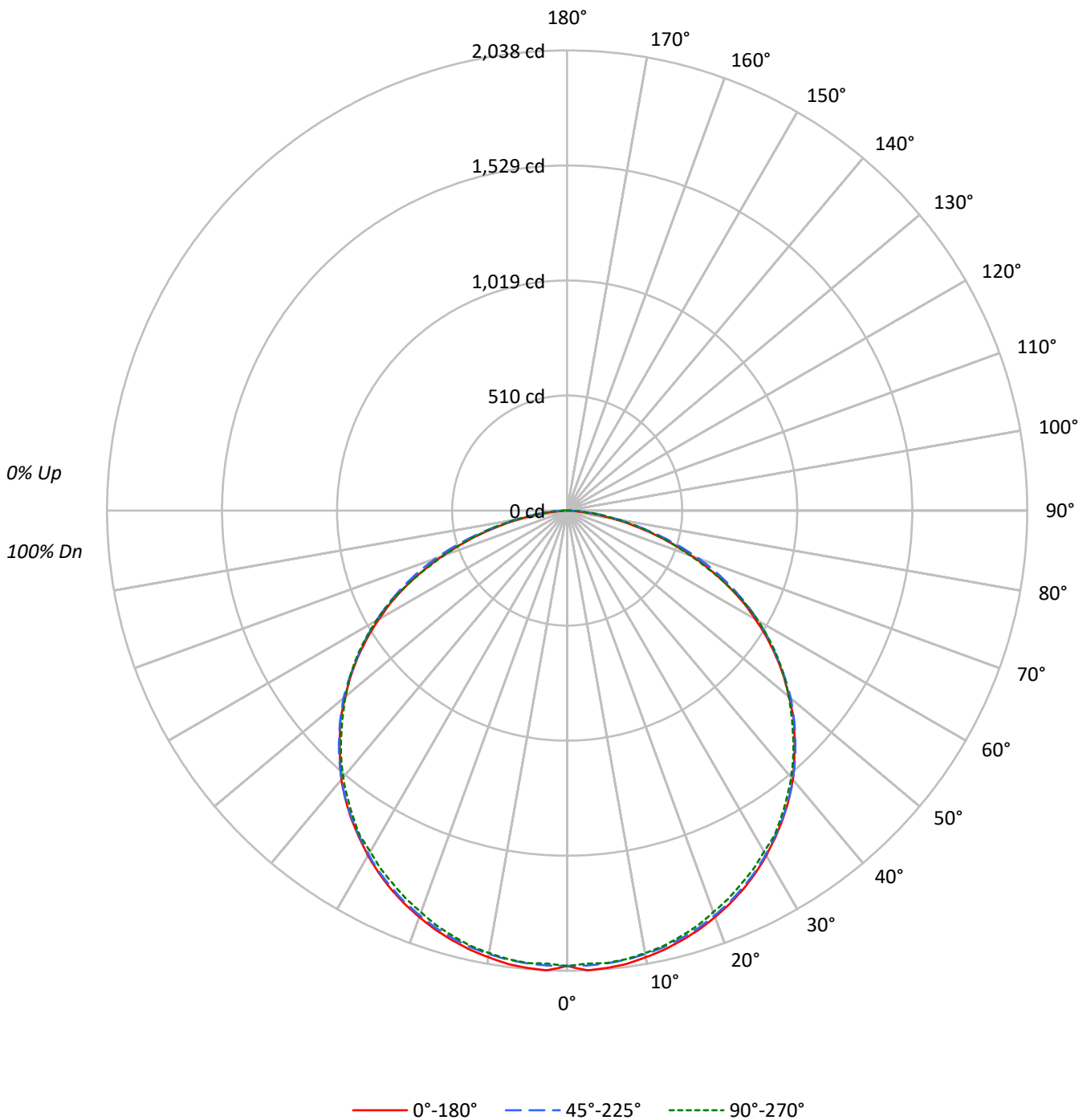
Lumens per Lamp: N/A
Luminaire Lumens: 6050.0 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.29 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 48
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



TEST NUMBER: P#
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Luminous Intensity Polar Plot





TEST NUMBER: P#

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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 | 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 | | | | | 100 | | | |
| 1 | 109 | 104 | 99 | 96 | 106 | 101 | 98 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 83 | | | | | 83 | | | |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 | | | | | 69 | | | |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 72 | 66 | 61 | 69 | 64 | 60 | 58 | | | | | 58 | | | |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | 49 | | | |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 | | | | | 42 | | | |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 39 | 50 | 44 | 39 | 37 | | | | | 37 | | | |
| 7 | 64 | 51 | 42 | 35 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 33 | | | | | 33 | | | |
| 8 | 60 | 46 | 37 | 32 | 58 | 45 | 37 | 31 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 29 | | | | | 29 | | | |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | | | | | 26 | | | |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 36 | 30 | 25 | 23 | | | | | 23 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16298 | 16298 | 16298 |
| 5° | 16446 | 15927 | 15800 |
| 10° | 16392 | 15577 | 15313 |
| 15° | 16340 | 15228 | 14833 |
| 20° | 16292 | 14854 | 14322 |
| 25° | 16246 | 14479 | 13845 |
| 30° | 16169 | 14077 | 13374 |
| 35° | 16087 | 13660 | 12923 |
| 40° | 15991 | 13212 | 12382 |
| 45° | 15788 | 12682 | 11763 |
| 50° | 15548 | 12105 | 11134 |
| 55° | 15250 | 11334 | 10454 |
| 60° | 14759 | 10548 | 9566 |
| 65° | 14039 | 9528 | 8320 |
| 70° | 12794 | 8187 | 6746 |
| 75° | 10869 | 6247 | 5185 |
| 80° | 8120 | 4115 | 3400 |
| 85° | 4195 | 2003 | 1518 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 191.4 | 3.2 |
| 10°-20° | 552.0 | 9.1 |
| 20°-30° | 845.0 | 14.0 |
| 30°-40° | 1035.3 | 17.1 |
| 40°-50° | 1095.0 | 18.1 |
| 50°-60° | 1010.8 | 16.7 |
| 60°-70° | 780.2 | 12.9 |
| 70°-80° | 433.0 | 7.2 |
| 80°-90° | 107.3 | 1.8 |
| 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° | 1588.4 | 26.3 |
| 0°-40° | 2623.7 | 43.4 |
| 0°-60° | 4729.5 | 78.2 |
| 0°-90° | 6050.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6050.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2017 | 2017 | 2017 | 2017 | 2017 | |
| 5° | 2033 | 2007 | 2013 | 2008 | 2012 | 193 |
| 15° | 1970 | 1946 | 1960 | 1953 | 1951 | 556 |
| 25° | 1849 | 1826 | 1842 | 1826 | 1824 | 852 |
| 35° | 1666 | 1648 | 1663 | 1645 | 1654 | 1043 |
| 45° | 1425 | 1412 | 1429 | 1414 | 1416 | 1099 |
| 55° | 1131 | 1122 | 1135 | 1134 | 1140 | 1009 |
| 65° | 783 | 775 | 806 | 800 | 785 | 772 |
| 75° | 389 | 412 | 415 | 414 | 399 | 412 |
| 85° | 61 | 91 | 93 | 94 | 87 | 83 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70HL-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2016.8 | 2016.8 | 2016.8 | 2016.8 | 2016.8 |
| 2.5° | 2037.9 | 2011.7 | 2016.8 | 2013.8 | 2007.7 |
| 5° | 2032.9 | 2006.7 | 2012.8 | 2007.7 | 2011.7 |
| 7.5° | 2024.8 | 1996.6 | 2006.7 | 1999.7 | 2003.7 |
| 10° | 2008.7 | 1984.6 | 1994.6 | 1986.6 | 1989.6 |
| 12.5° | 1991.6 | 1966.4 | 1980.5 | 1970.5 | 1974.5 |
| 15° | 1969.5 | 1946.3 | 1960.4 | 1953.3 | 1951.3 |
| 17.5° | 1945.3 | 1923.1 | 1937.2 | 1929.2 | 1926.2 |
| 20° | 1916.1 | 1894.9 | 1908.0 | 1896.0 | 1892.9 |
| 22.5° | 1883.9 | 1862.7 | 1877.8 | 1860.7 | 1861.7 |
| 25° | 1848.6 | 1826.5 | 1841.6 | 1825.5 | 1824.5 |
| 27.5° | 1808.4 | 1787.2 | 1803.3 | 1786.2 | 1788.2 |
| 30° | 1764.1 | 1742.9 | 1759.0 | 1741.9 | 1743.9 |
| 32.5° | 1715.7 | 1698.6 | 1712.7 | 1696.6 | 1707.7 |
| 35° | 1666.4 | 1648.3 | 1663.4 | 1645.2 | 1654.3 |
| 37.5° | 1613.0 | 1595.9 | 1612.0 | 1591.9 | 1599.9 |
| 40° | 1555.6 | 1540.5 | 1554.6 | 1536.5 | 1543.5 |
| 42.5° | 1489.2 | 1480.1 | 1494.2 | 1476.1 | 1482.1 |
| 45° | 1424.7 | 1411.6 | 1428.8 | 1413.7 | 1415.7 |
| 47.5° | 1360.3 | 1346.2 | 1362.3 | 1349.2 | 1348.2 |
| 50° | 1282.8 | 1277.7 | 1292.8 | 1282.8 | 1281.8 |
| 52.5° | 1209.3 | 1199.2 | 1215.3 | 1210.3 | 1213.3 |
| 55° | 1130.7 | 1121.7 | 1134.8 | 1133.7 | 1139.8 |
| 57.5° | 1049.2 | 1040.1 | 1057.2 | 1055.2 | 1060.2 |
| 60° | 962.6 | 955.5 | 977.7 | 972.6 | 976.7 |
| 62.5° | 878.0 | 864.9 | 893.1 | 889.1 | 887.1 |
| 65° | 783.4 | 775.3 | 805.5 | 800.5 | 785.4 |
| 67.5° | 685.7 | 682.7 | 713.9 | 703.8 | 678.6 |
| 70° | 588.0 | 590.0 | 620.2 | 601.1 | 580.0 |
| 72.5° | 485.3 | 500.4 | 518.5 | 504.4 | 489.3 |
| 75° | 388.7 | 411.8 | 414.8 | 413.8 | 398.7 |
| 77.5° | 294.0 | 323.2 | 316.2 | 323.2 | 311.1 |
| 80° | 205.4 | 237.6 | 232.6 | 238.6 | 228.6 |
| 82.5° | 126.9 | 156.1 | 157.1 | 161.1 | 152.0 |
| 85° | 61.4 | 90.6 | 92.6 | 93.6 | 86.6 |
| 87.5° | 13.1 | 42.3 | 43.3 | 40.3 | 35.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)