

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-LD5-55HL-SLC-UNV-L930-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 (P27404)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-55HL-SLC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR SQUARE LENS
Light Source: -
Ballast/Driver: -

Summary

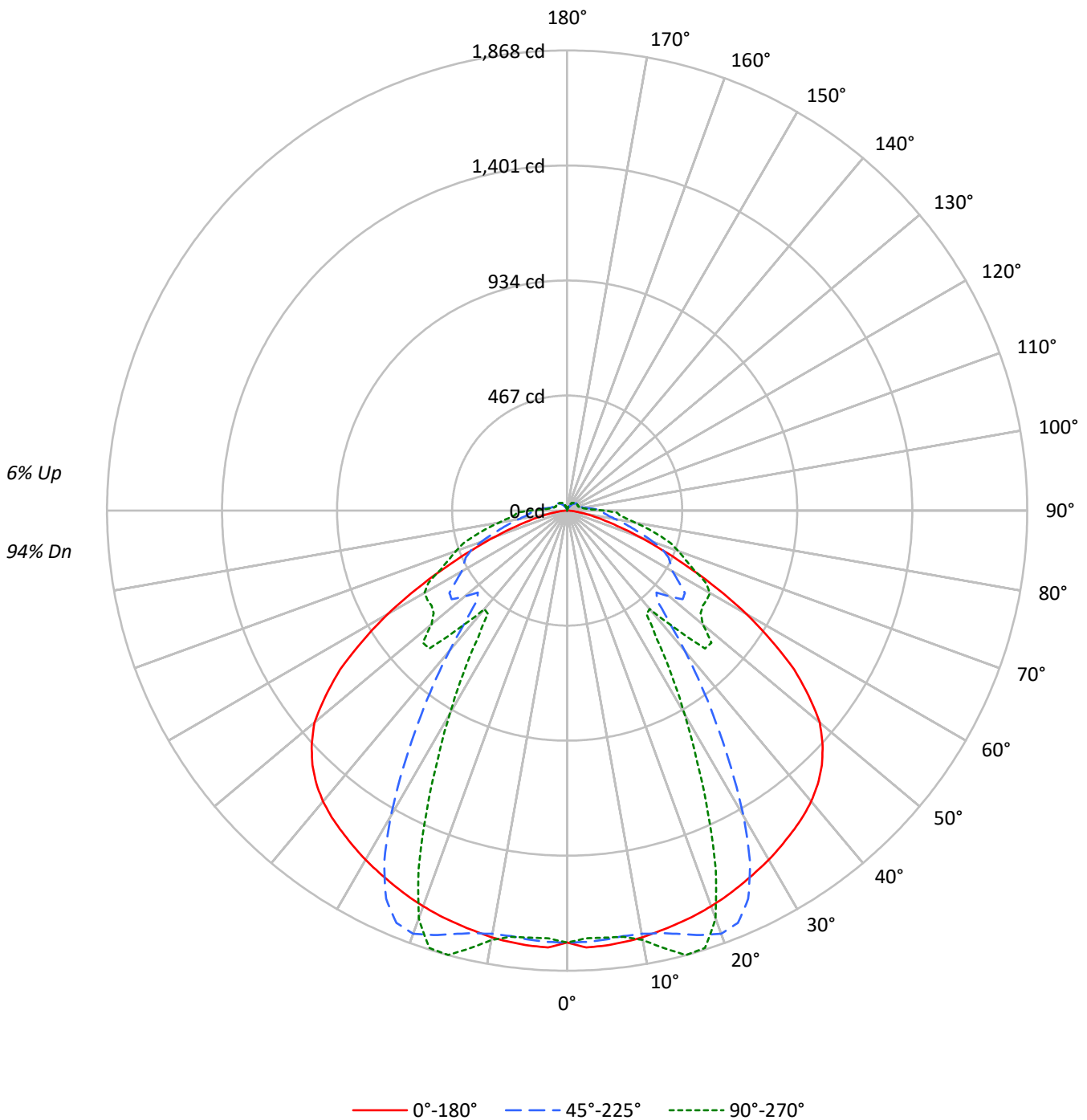
Lumens per Lamp: N/A
Luminaire Lumens: 4504.0 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1 / 1.08
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 39
Input Voltage (V): NR
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: 4SNLED-LD5-55HL-SLC-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-55HL-SLC-UNV-L930-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 | 92 | 94 | 91 | 88 | 89 | 87 | 84 | 85 | 83 | 81 | 78 |
| 2 | 98 | 90 | 83 | 77 | 95 | 87 | 81 | 76 | 83 | 78 | 73 | 79 | 74 | 71 | 75 | 71 | 68 | 66 |
| 3 | 89 | 79 | 71 | 65 | 87 | 77 | 70 | 64 | 73 | 67 | 62 | 70 | 65 | 60 | 67 | 62 | 59 | 56 |
| 4 | 82 | 71 | 62 | 56 | 80 | 69 | 61 | 55 | 66 | 59 | 53 | 63 | 57 | 52 | 60 | 55 | 51 | 49 |
| 5 | 76 | 63 | 55 | 48 | 74 | 62 | 54 | 48 | 59 | 52 | 47 | 57 | 51 | 46 | 54 | 49 | 45 | 43 |
| 6 | 70 | 58 | 49 | 43 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 52 | 45 | 41 | 50 | 44 | 40 | 38 |
| 7 | 66 | 52 | 44 | 38 | 64 | 51 | 43 | 38 | 49 | 42 | 37 | 47 | 41 | 36 | 46 | 40 | 36 | 34 |
| 8 | 61 | 48 | 40 | 34 | 59 | 47 | 39 | 34 | 45 | 38 | 33 | 44 | 37 | 33 | 42 | 37 | 32 | 30 |
| 9 | 57 | 44 | 36 | 31 | 56 | 44 | 36 | 31 | 42 | 35 | 30 | 41 | 34 | 30 | 39 | 34 | 29 | 28 |
| 10 | 54 | 41 | 33 | 28 | 52 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14169 | 14169 | 14169 |
| 5° | 14342 | 13837 | 13667 |
| 10° | 14360 | 13626 | 13620 |
| 15° | 14399 | 13819 | 14196 |
| 20° | 14532 | 14230 | 13324 |
| 25° | 14713 | 13676 | 10260 |
| 30° | 15003 | 11454 | 7298 |
| 35° | 15376 | 8675 | 4942 |
| 40° | 15846 | 6306 | 4184 |
| 45° | 16205 | 4575 | 6578 |
| 50° | 16228 | 5066 | 6243 |
| 55° | 15169 | 5830 | 6165 |
| 60° | 12923 | 5334 | 6553 |
| 65° | 9722 | 5379 | 5994 |
| 70° | 6824 | 4897 | 5580 |
| 75° | 4471 | 4103 | 5007 |
| 80° | 2854 | 3515 | 4168 |
| 85° | 1537 | 3342 | 3740 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-55HL-SLC-UNV-L930-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 166.8 | 3.7 |
| 10°-20° | 503.8 | 11.2 |
| 20°-30° | 731.8 | 16.2 |
| 30°-40° | 699.2 | 15.5 |
| 40°-50° | 639.6 | 14.2 |
| 50°-60° | 590.5 | 13.1 |
| 60°-70° | 469.1 | 10.4 |
| 70°-80° | 289.5 | 6.4 |
| 80°-90° | 157.7 | 3.5 |
| 90°-100° | 79.7 | 1.8 |
| 100°-110° | 50.1 | 1.1 |
| 110°-120° | 42.4 | 0.9 |
| 120°-130° | 34.6 | 0.8 |
| 130°-140° | 24.9 | 0.6 |
| 140°-150° | 15.3 | 0.3 |
| 150°-160° | 7.3 | 0.2 |
| 160°-170° | 1.9 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1402.3 | 31.1 |
| 0°-40° | 2101.5 | 46.7 |
| 0°-60° | 3331.6 | 74.0 |
| 0°-90° | 4247.9 | 94.3 |
| 90°-120° | 172.2 | 3.8 |
| 90°-150° | 247.0 | 5.5 |
| 90°-180° | 256.0 | 5.7 |
| 0°-180° | 4504.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1753 | 1753 | 1753 | 1753 | 1753 | |
| 5° | 1773 | 1746 | 1749 | 1739 | 1740 | 169 |
| 15° | 1736 | 1712 | 1779 | 1845 | 1868 | 491 |
| 25° | 1674 | 1707 | 1739 | 1472 | 1352 | 774 |
| 35° | 1593 | 1567 | 1056 | 727 | 633 | 999 |
| 45° | 1462 | 1020 | 515 | 657 | 792 | 1124 |
| 55° | 1125 | 523 | 584 | 628 | 672 | 991 |
| 65° | 542 | 339 | 455 | 553 | 566 | 549 |
| 75° | 160 | 181 | 272 | 361 | 385 | 181 |
| 85° | 22 | 77 | 154 | 210 | 213 | 29 |
| 90° | 1 | 57 | 138 | 164 | 151 | 1 |
| 95° | 0 | 54 | 96 | 85 | 80 | 0 |
| 105° | 0 | 48 | 59 | 54 | 53 | 0 |
| 115° | 0 | 40 | 57 | 50 | 48 | 0 |
| 125° | 1 | 32 | 50 | 49 | 47 | 1 |
| 135° | 1 | 22 | 40 | 44 | 43 | 1 |
| 145° | 1 | 14 | 28 | 36 | 38 | 1 |
| 155° | 2 | 8 | 17 | 22 | 27 | 1 |
| 165° | 2 | 5 | 8 | 11 | 15 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-55HL-SLC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1753.4 | 1753.4 | 1753.4 | 1753.4 | 1753.4 |
| 2.5° | 1775.1 | 1749.5 | 1752.6 | 1747.2 | 1737.8 |
| 5° | 1772.8 | 1745.6 | 1748.7 | 1739.4 | 1740.2 |
| 7.5° | 1766.6 | 1738.6 | 1742.5 | 1740.9 | 1744.8 |
| 10° | 1759.6 | 1730.1 | 1744.8 | 1758.0 | 1769.7 |
| 12.5° | 1747.2 | 1720.8 | 1756.5 | 1795.3 | 1819.3 |
| 15° | 1735.5 | 1712.2 | 1779.0 | 1845.0 | 1867.5 |
| 17.5° | 1723.9 | 1709.1 | 1806.9 | 1864.4 | 1861.3 |
| 20° | 1709.1 | 1707.6 | 1827.9 | 1808.5 | 1761.1 |
| 22.5° | 1692.8 | 1708.3 | 1811.6 | 1669.5 | 1576.4 |
| 25° | 1674.2 | 1706.8 | 1739.4 | 1472.4 | 1352.1 |
| 27.5° | 1655.6 | 1699.8 | 1608.2 | 1256.6 | 1137.9 |
| 30° | 1636.9 | 1681.2 | 1431.3 | 1059.5 | 951.6 |
| 32.5° | 1615.2 | 1640.8 | 1238.8 | 884.8 | 785.5 |
| 35° | 1592.7 | 1567.1 | 1056.4 | 727.3 | 632.6 |
| 37.5° | 1569.4 | 1460.7 | 892.6 | 589.1 | 528.6 |
| 40° | 1541.5 | 1327.2 | 742.0 | 505.3 | 521.6 |
| 42.5° | 1506.5 | 1176.7 | 609.3 | 530.1 | 643.4 |
| 45° | 1462.3 | 1019.9 | 515.4 | 657.4 | 791.7 |
| 47.5° | 1406.4 | 869.3 | 492.1 | 752.9 | 794.8 |
| 50° | 1338.9 | 731.2 | 541.0 | 721.8 | 718.7 |
| 52.5° | 1236.4 | 616.3 | 590.7 | 658.2 | 683.0 |
| 55° | 1124.7 | 523.1 | 583.7 | 627.9 | 672.2 |
| 57.5° | 983.4 | 460.3 | 535.6 | 621.7 | 672.9 |
| 60° | 842.9 | 418.4 | 494.4 | 620.9 | 669.1 |
| 62.5° | 687.7 | 380.3 | 473.5 | 606.2 | 634.9 |
| 65° | 542.5 | 339.2 | 454.8 | 552.6 | 565.8 |
| 67.5° | 416.0 | 297.3 | 422.2 | 492.9 | 519.3 |
| 70° | 313.6 | 256.1 | 371.0 | 447.1 | 479.7 |
| 72.5° | 225.9 | 217.3 | 318.2 | 406.7 | 440.9 |
| 75° | 159.9 | 180.8 | 272.4 | 360.9 | 385.0 |
| 77.5° | 110.2 | 147.5 | 233.6 | 310.5 | 329.9 |
| 80° | 72.2 | 118.0 | 198.7 | 267.0 | 280.2 |
| 82.5° | 43.5 | 94.7 | 172.3 | 233.6 | 240.6 |
| 85° | 22.5 | 76.8 | 154.5 | 210.3 | 213.4 |
| 87.5° | 7.0 | 64.4 | 144.4 | 199.5 | 203.4 |
| 90° | 0.8 | 57.4 | 138.2 | 163.8 | 151.4 |
| 92.5° | 0.0 | 54.3 | 119.5 | 111.8 | 100.1 |
| 95° | 0.0 | 53.6 | 95.5 | 84.6 | 79.9 |
| 97.5° | 0.0 | 52.0 | 78.4 | 70.6 | 68.3 |
| 100° | 0.0 | 50.5 | 67.5 | 62.1 | 61.3 |
| 102.5° | 0.0 | 49.7 | 61.3 | 56.7 | 55.9 |
| 105° | 0.0 | 48.1 | 59.0 | 53.6 | 52.8 |
| 107.5° | 0.0 | 45.8 | 57.4 | 52.0 | 50.5 |
| 110° | 0.0 | 43.5 | 57.4 | 51.2 | 48.9 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-55HL-SLC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 41.1 | 57.4 | 50.5 | 48.1 |
| 115° | 0.0 | 39.6 | 56.7 | 50.5 | 48.1 |
| 117.5° | 0.8 | 38.0 | 55.9 | 50.5 | 48.1 |
| 120° | 0.0 | 36.5 | 54.3 | 50.5 | 47.3 |
| 122.5° | 0.8 | 34.2 | 52.8 | 49.7 | 47.3 |
| 125° | 0.8 | 31.8 | 50.5 | 48.9 | 46.6 |
| 127.5° | 0.8 | 29.5 | 48.1 | 47.3 | 45.0 |
| 130° | 0.8 | 27.2 | 45.8 | 46.6 | 44.2 |
| 132.5° | 0.8 | 24.8 | 42.7 | 45.0 | 43.5 |
| 135° | 0.8 | 22.5 | 40.4 | 44.2 | 42.7 |
| 137.5° | 0.8 | 20.2 | 37.3 | 41.9 | 41.9 |
| 140° | 0.8 | 17.9 | 34.2 | 40.4 | 41.1 |
| 142.5° | 0.8 | 16.3 | 31.0 | 38.8 | 39.6 |
| 145° | 0.8 | 14.0 | 27.9 | 35.7 | 38.0 |
| 147.5° | 0.8 | 12.4 | 24.8 | 32.6 | 35.7 |
| 150° | 0.8 | 10.9 | 21.7 | 29.5 | 32.6 |
| 152.5° | 0.8 | 9.3 | 19.4 | 25.6 | 30.3 |
| 155° | 1.6 | 8.5 | 17.1 | 22.5 | 27.2 |
| 157.5° | 1.6 | 7.0 | 14.0 | 19.4 | 23.3 |
| 160° | 1.6 | 6.2 | 12.4 | 16.3 | 21.0 |
| 162.5° | 1.6 | 5.4 | 10.1 | 14.0 | 17.9 |
| 165° | 1.6 | 4.7 | 8.5 | 10.9 | 14.7 |
| 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)