

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-LD5-56SL-SLC-UNV-L935-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-LD5-56SL-SLC-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR SQUARE LENS
Light Source: -
Ballast/Driver: -

Summary

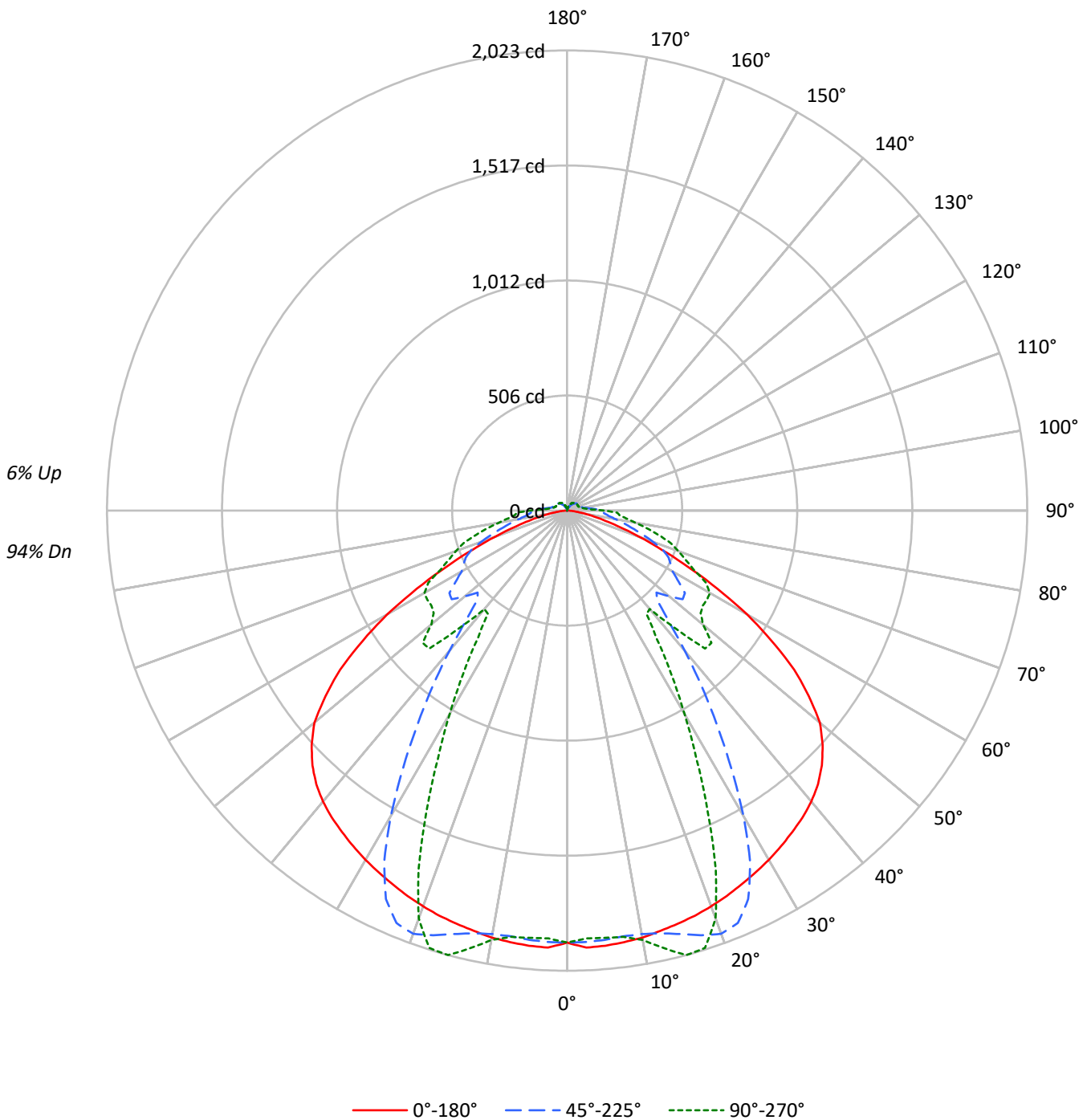
Lumens per Lamp: N/A
Luminaire Lumens: 4879.0 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1 / 1.08
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 46
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 | 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° | 15348 | 15348 | 15348 |
| 5° | 15536 | 14989 | 14805 |
| 10° | 15555 | 14761 | 14754 |
| 15° | 15598 | 14969 | 15377 |
| 20° | 15742 | 15415 | 14434 |
| 25° | 15939 | 14814 | 11114 |
| 30° | 16253 | 12407 | 7905 |
| 35° | 16656 | 9397 | 5353 |
| 40° | 17165 | 6831 | 4533 |
| 45° | 17555 | 4956 | 7126 |
| 50° | 17579 | 5487 | 6763 |
| 55° | 16431 | 6315 | 6678 |
| 60° | 14000 | 5779 | 7099 |
| 65° | 10532 | 5828 | 6493 |
| 70° | 7392 | 5305 | 6044 |
| 75° | 4843 | 4445 | 5423 |
| 80° | 3091 | 3807 | 4514 |
| 85° | 1667 | 3619 | 4052 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-SLC-UNV-L935-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 180.7 | 3.7 |
| 10°-20° | 545.7 | 11.2 |
| 20°-30° | 792.7 | 16.2 |
| 30°-40° | 757.4 | 15.5 |
| 40°-50° | 692.8 | 14.2 |
| 50°-60° | 639.7 | 13.1 |
| 60°-70° | 508.1 | 10.4 |
| 70°-80° | 313.6 | 6.4 |
| 80°-90° | 170.8 | 3.5 |
| 90°-100° | 86.3 | 1.8 |
| 100°-110° | 54.2 | 1.1 |
| 110°-120° | 46.0 | 0.9 |
| 120°-130° | 37.5 | 0.8 |
| 130°-140° | 26.9 | 0.6 |
| 140°-150° | 16.6 | 0.3 |
| 150°-160° | 7.9 | 0.2 |
| 160°-170° | 2.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1519.1 | 31.1 |
| 0°-40° | 2276.5 | 46.7 |
| 0°-60° | 3609.0 | 74.0 |
| 0°-90° | 4601.5 | 94.3 |
| 90°-120° | 186.5 | 3.8 |
| 90°-150° | 267.5 | 5.5 |
| 90°-180° | 277.0 | 5.7 |
| 0°-180° | 4879.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1899 | 1899 | 1899 | 1899 | 1899 | |
| 5° | 1920 | 1891 | 1894 | 1884 | 1885 | 183 |
| 15° | 1880 | 1855 | 1927 | 1999 | 2023 | 532 |
| 25° | 1814 | 1849 | 1884 | 1595 | 1465 | 838 |
| 35° | 1725 | 1698 | 1144 | 788 | 685 | 1082 |
| 45° | 1584 | 1105 | 558 | 712 | 858 | 1217 |
| 55° | 1218 | 567 | 632 | 680 | 728 | 1073 |
| 65° | 588 | 367 | 493 | 599 | 613 | 594 |
| 75° | 173 | 196 | 295 | 391 | 417 | 196 |
| 85° | 24 | 83 | 167 | 228 | 231 | 31 |
| 90° | 1 | 62 | 150 | 177 | 164 | 1 |
| 95° | 0 | 58 | 103 | 92 | 87 | 0 |
| 105° | 0 | 52 | 64 | 58 | 57 | 0 |
| 115° | 0 | 43 | 61 | 55 | 52 | 0 |
| 125° | 1 | 34 | 55 | 53 | 50 | 1 |
| 135° | 1 | 24 | 44 | 48 | 46 | 1 |
| 145° | 1 | 15 | 30 | 39 | 41 | 1 |
| 155° | 2 | 9 | 18 | 24 | 29 | 1 |
| 165° | 2 | 5 | 9 | 12 | 16 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-SLC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1899.3 | 1899.3 | 1899.3 | 1899.3 | 1899.3 |
| 2.5° | 1922.9 | 1895.1 | 1898.5 | 1892.6 | 1882.5 |
| 5° | 1920.4 | 1890.9 | 1894.3 | 1884.2 | 1885.1 |
| 7.5° | 1913.6 | 1883.4 | 1887.6 | 1885.9 | 1890.1 |
| 10° | 1906.1 | 1874.1 | 1890.1 | 1904.4 | 1917.0 |
| 12.5° | 1892.6 | 1864.0 | 1902.7 | 1944.8 | 1970.8 |
| 15° | 1880.0 | 1854.8 | 1927.1 | 1998.6 | 2022.9 |
| 17.5° | 1867.4 | 1851.4 | 1957.4 | 2019.6 | 2016.2 |
| 20° | 1851.4 | 1849.7 | 1980.1 | 1959.0 | 1907.8 |
| 22.5° | 1833.8 | 1850.6 | 1962.4 | 1808.5 | 1707.6 |
| 25° | 1813.6 | 1848.9 | 1884.2 | 1595.0 | 1464.7 |
| 27.5° | 1793.4 | 1841.3 | 1742.1 | 1361.2 | 1232.6 |
| 30° | 1773.2 | 1821.2 | 1550.4 | 1147.7 | 1030.8 |
| 32.5° | 1749.7 | 1777.4 | 1341.9 | 958.5 | 850.9 |
| 35° | 1725.3 | 1697.6 | 1144.3 | 787.8 | 685.2 |
| 37.5° | 1700.1 | 1582.4 | 966.9 | 638.2 | 572.6 |
| 40° | 1669.8 | 1437.8 | 803.8 | 547.4 | 565.0 |
| 42.5° | 1632.0 | 1274.6 | 660.0 | 574.3 | 697.0 |
| 45° | 1584.1 | 1104.8 | 558.3 | 712.2 | 857.6 |
| 47.5° | 1523.5 | 941.7 | 533.1 | 815.6 | 861.0 |
| 50° | 1450.4 | 792.0 | 586.0 | 781.9 | 778.6 |
| 52.5° | 1339.4 | 667.6 | 639.8 | 713.0 | 739.9 |
| 55° | 1218.3 | 566.7 | 632.3 | 680.2 | 728.1 |
| 57.5° | 1065.3 | 498.6 | 580.1 | 673.5 | 729.0 |
| 60° | 913.1 | 453.2 | 535.6 | 672.6 | 724.8 |
| 62.5° | 744.9 | 412.0 | 512.9 | 656.7 | 687.8 |
| 65° | 587.7 | 367.4 | 492.7 | 598.6 | 612.9 |
| 67.5° | 450.7 | 322.0 | 457.4 | 533.9 | 562.5 |
| 70° | 339.7 | 277.5 | 401.9 | 484.3 | 519.6 |
| 72.5° | 244.7 | 235.4 | 344.7 | 440.6 | 477.6 |
| 75° | 173.2 | 195.9 | 295.1 | 391.0 | 417.0 |
| 77.5° | 119.4 | 159.8 | 253.1 | 336.3 | 357.3 |
| 80° | 78.2 | 127.8 | 215.2 | 289.2 | 303.5 |
| 82.5° | 47.1 | 102.6 | 186.7 | 253.1 | 260.6 |
| 85° | 24.4 | 83.2 | 167.3 | 227.9 | 231.2 |
| 87.5° | 7.6 | 69.8 | 156.4 | 216.1 | 220.3 |
| 90° | 0.8 | 62.2 | 149.7 | 177.4 | 164.0 |
| 92.5° | 0.0 | 58.9 | 129.5 | 121.1 | 108.5 |
| 95° | 0.0 | 58.0 | 103.4 | 91.6 | 86.6 |
| 97.5° | 0.0 | 56.3 | 84.9 | 76.5 | 74.0 |
| 100° | 0.0 | 54.7 | 73.1 | 67.3 | 66.4 |
| 102.5° | 0.0 | 53.8 | 66.4 | 61.4 | 60.5 |
| 105° | 0.0 | 52.1 | 63.9 | 58.0 | 57.2 |
| 107.5° | 0.0 | 49.6 | 62.2 | 56.3 | 54.7 |
| 110° | 0.0 | 47.1 | 62.2 | 55.5 | 53.0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-SLC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 44.6 | 62.2 | 54.7 | 52.1 |
| 115° | 0.0 | 42.9 | 61.4 | 54.7 | 52.1 |
| 117.5° | 0.8 | 41.2 | 60.5 | 54.7 | 52.1 |
| 120° | 0.0 | 39.5 | 58.9 | 54.7 | 51.3 |
| 122.5° | 0.8 | 37.0 | 57.2 | 53.8 | 51.3 |
| 125° | 0.8 | 34.5 | 54.7 | 53.0 | 50.4 |
| 127.5° | 0.8 | 32.0 | 52.1 | 51.3 | 48.8 |
| 130° | 0.8 | 29.4 | 49.6 | 50.4 | 47.9 |
| 132.5° | 0.8 | 26.9 | 46.2 | 48.8 | 47.1 |
| 135° | 0.8 | 24.4 | 43.7 | 47.9 | 46.2 |
| 137.5° | 0.8 | 21.9 | 40.4 | 45.4 | 45.4 |
| 140° | 0.8 | 19.3 | 37.0 | 43.7 | 44.6 |
| 142.5° | 0.8 | 17.7 | 33.6 | 42.0 | 42.9 |
| 145° | 0.8 | 15.1 | 30.3 | 38.7 | 41.2 |
| 147.5° | 0.8 | 13.5 | 26.9 | 35.3 | 38.7 |
| 150° | 0.8 | 11.8 | 23.5 | 32.0 | 35.3 |
| 152.5° | 0.8 | 10.1 | 21.0 | 27.7 | 32.8 |
| 155° | 1.7 | 9.2 | 18.5 | 24.4 | 29.4 |
| 157.5° | 1.7 | 7.6 | 15.1 | 21.0 | 25.2 |
| 160° | 1.7 | 6.7 | 13.5 | 17.7 | 22.7 |
| 162.5° | 1.7 | 5.9 | 10.9 | 15.1 | 19.3 |
| 165° | 1.7 | 5.0 | 9.2 | 11.8 | 16.0 |
| 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)