

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1214192

Luminaire Tested: 4SNLED-LD5-60SL-UNV-L950-CD1-U

Issue Date: 3/29/2018

**Test Information**

Test Method: LM-79-2019  
Report Number: P1214192  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27410)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/29/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-60SL-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
OPEN LED STIP  
Light Source: -  
Ballast/Driver: -

**Summary**

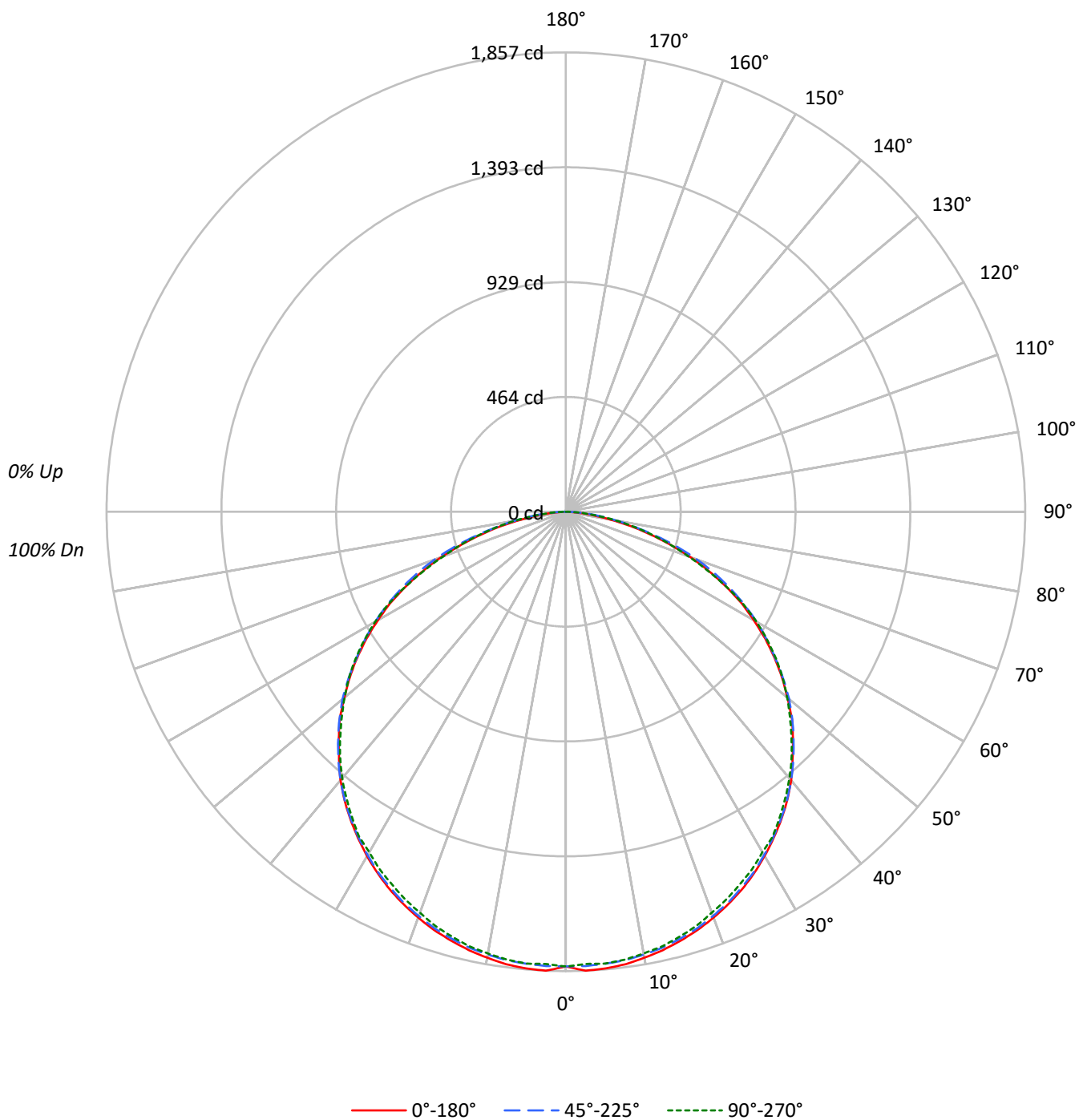
Lumens per Lamp: N/A  
Luminaire Lumens: 5513.0 lumens  
Efficiency: N/A  
Efficacy: 119.8 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.29 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 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: 24 FT

TEST NUMBER: P1214192

CATALOG NUMBER: 4SNLED-LD5-60SL-UNV-L950-CD1-U

### Luminous Intensity Polar Plot



TEST NUMBER: P1214192

CATALOG NUMBER: 4SNLED-LD5-60SL-UNV-L950-CD1-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 109 | 104 | 99  | 96  | 106 | 101 | 98  | 94  | 97  | 94  | 91  |  | 93  | 91  | 88  |  | 90  |
| 2   | 99  | 90  | 83  | 77  | 96  | 88  | 82  | 76  | 85  | 79  | 75  |  | 81  | 77  | 73  |  | 78  |
| 3   | 90  | 79  | 71  | 64  | 87  | 77  | 70  | 63  | 74  | 68  | 62  |  | 72  | 66  | 61  |  | 69  |
| 4   | 82  | 70  | 61  | 54  | 80  | 68  | 60  | 54  | 66  | 59  | 53  |  | 64  | 57  | 52  |  | 61  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 46  |  | 57  | 50  | 45  |  | 55  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 40  |  | 51  | 45  | 39  |  | 50  |
| 7   | 64  | 51  | 42  | 35  | 63  | 50  | 41  | 35  | 48  | 41  | 35  |  | 47  | 40  | 35  |  | 45  |
| 8   | 60  | 46  | 37  | 32  | 58  | 45  | 37  | 31  | 44  | 37  | 31  |  | 43  | 36  | 31  |  | 42  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  |  | 36  | 30  | 25  |  | 36  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 14851 | 14851 | 14851 |
| 5°  | 14986 | 14513 | 14398 |
| 10° | 14937 | 14195 | 13953 |
| 15° | 14889 | 13876 | 13516 |
| 20° | 14846 | 13536 | 13050 |
| 25° | 14804 | 13194 | 12615 |
| 30° | 14734 | 12827 | 12187 |
| 35° | 14659 | 12447 | 11776 |
| 40° | 14572 | 12039 | 11283 |
| 45° | 14388 | 11556 | 10719 |
| 50° | 14168 | 11031 | 10145 |
| 55° | 13897 | 10327 | 9526  |
| 60° | 13448 | 9612  | 8717  |
| 65° | 12792 | 8682  | 7582  |
| 70° | 11659 | 7461  | 6147  |
| 75° | 9904  | 5693  | 4725  |
| 80° | 7400  | 3749  | 3098  |
| 85° | 3826  | 1826  | 1383  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14388 cd/sqm

TEST NUMBER: P1214192

CATALOG NUMBER: 4SNLED-LD5-60SL-UNV-L950-CD1-U

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 174.4  | 3.2       |
| 10°-20°   | 503.0  | 9.1       |
| 20°-30°   | 770.0  | 14.0      |
| 30°-40°   | 943.4  | 17.1      |
| 40°-50°   | 997.8  | 18.1      |
| 50°-60°   | 921.1  | 16.7      |
| 60°-70°   | 710.9  | 12.9      |
| 70°-80°   | 394.6  | 7.2       |
| 80°-90°   | 97.7   | 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°    | 1447.4 | 26.3      |
| 0°-40°    | 2390.9 | 43.4      |
| 0°-60°    | 4309.8 | 78.2      |
| 0°-90°    | 5513.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5513.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1838 | 1838  | 1838 | 1838  | 1838 |      |
| 5°  | 1852 | 1829  | 1834 | 1830  | 1833 | 176  |
| 15° | 1795 | 1774  | 1786 | 1780  | 1778 | 507  |
| 25° | 1684 | 1664  | 1678 | 1663  | 1662 | 776  |
| 35° | 1518 | 1502  | 1516 | 1499  | 1508 | 950  |
| 45° | 1298 | 1286  | 1302 | 1288  | 1290 | 1002 |
| 55° | 1030 | 1022  | 1034 | 1033  | 1039 | 920  |
| 65° | 714  | 706   | 734  | 729   | 716  | 704  |
| 75° | 354  | 375   | 378  | 377   | 363  | 376  |
| 85° | 56   | 83    | 84   | 85    | 79   | 75   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1214192

CATALOG NUMBER: 4SNLED-LD5-60SL-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1837.8 | 1837.8 | 1837.8 | 1837.8 | 1837.8 |
| 2.5°  | 1857.0 | 1833.2 | 1837.8 | 1835.0 | 1829.5 |
| 5°    | 1852.5 | 1828.6 | 1834.1 | 1829.5 | 1833.2 |
| 7.5°  | 1845.1 | 1819.4 | 1828.6 | 1822.2 | 1825.8 |
| 10°   | 1830.4 | 1808.4 | 1817.6 | 1810.2 | 1813.0 |
| 12.5° | 1814.8 | 1791.9 | 1804.7 | 1795.6 | 1799.2 |
| 15°   | 1794.6 | 1773.5 | 1786.4 | 1780.0 | 1778.1 |
| 17.5° | 1772.6 | 1752.4 | 1765.3 | 1757.9 | 1755.2 |
| 20°   | 1746.0 | 1726.8 | 1738.7 | 1727.7 | 1724.9 |
| 22.5° | 1716.7 | 1697.4 | 1711.2 | 1695.6 | 1696.5 |
| 25°   | 1684.5 | 1664.4 | 1678.1 | 1663.4 | 1662.5 |
| 27.5° | 1647.8 | 1628.6 | 1643.3 | 1627.7 | 1629.5 |
| 30°   | 1607.5 | 1588.2 | 1602.9 | 1587.3 | 1589.1 |
| 32.5° | 1563.4 | 1547.8 | 1560.7 | 1546.0 | 1556.1 |
| 35°   | 1518.5 | 1502.0 | 1515.7 | 1499.2 | 1507.5 |
| 37.5° | 1469.9 | 1454.3 | 1468.9 | 1450.6 | 1457.9 |
| 40°   | 1417.6 | 1403.8 | 1416.6 | 1400.1 | 1406.5 |
| 42.5° | 1357.0 | 1348.7 | 1361.6 | 1345.1 | 1350.6 |
| 45°   | 1298.3 | 1286.3 | 1301.9 | 1288.2 | 1290.0 |
| 47.5° | 1239.6 | 1226.7 | 1241.4 | 1229.5 | 1228.5 |
| 50°   | 1168.9 | 1164.3 | 1178.1 | 1168.9 | 1168.0 |
| 52.5° | 1101.9 | 1092.8 | 1107.4 | 1102.8 | 1105.6 |
| 55°   | 1030.4 | 1022.1 | 1034.0 | 1033.1 | 1038.6 |
| 57.5° | 956.0  | 947.8  | 963.4  | 961.6  | 966.1  |
| 60°   | 877.1  | 870.7  | 890.9  | 886.3  | 890.0  |
| 62.5° | 800.1  | 788.1  | 813.8  | 810.2  | 808.3  |
| 65°   | 713.8  | 706.5  | 734.0  | 729.4  | 715.7  |
| 67.5° | 624.8  | 622.1  | 650.5  | 641.3  | 618.4  |
| 70°   | 535.8  | 537.7  | 565.2  | 547.8  | 528.5  |
| 72.5° | 442.2  | 456.0  | 472.5  | 459.7  | 445.9  |
| 75°   | 354.2  | 375.3  | 378.0  | 377.1  | 363.3  |
| 77.5° | 267.9  | 294.5  | 288.1  | 294.5  | 283.5  |
| 80°   | 187.2  | 216.5  | 211.9  | 217.4  | 208.3  |
| 82.5° | 115.6  | 142.2  | 143.1  | 146.8  | 138.5  |
| 85°   | 56.0   | 82.6   | 84.4   | 85.3   | 78.9   |
| 87.5° | 11.9   | 38.5   | 39.5   | 36.7   | 32.1   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)