

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-LD5-49SL-SLC-UNV-L950-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-LD5-49SL-SLC-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
CLEAR SQUARE LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

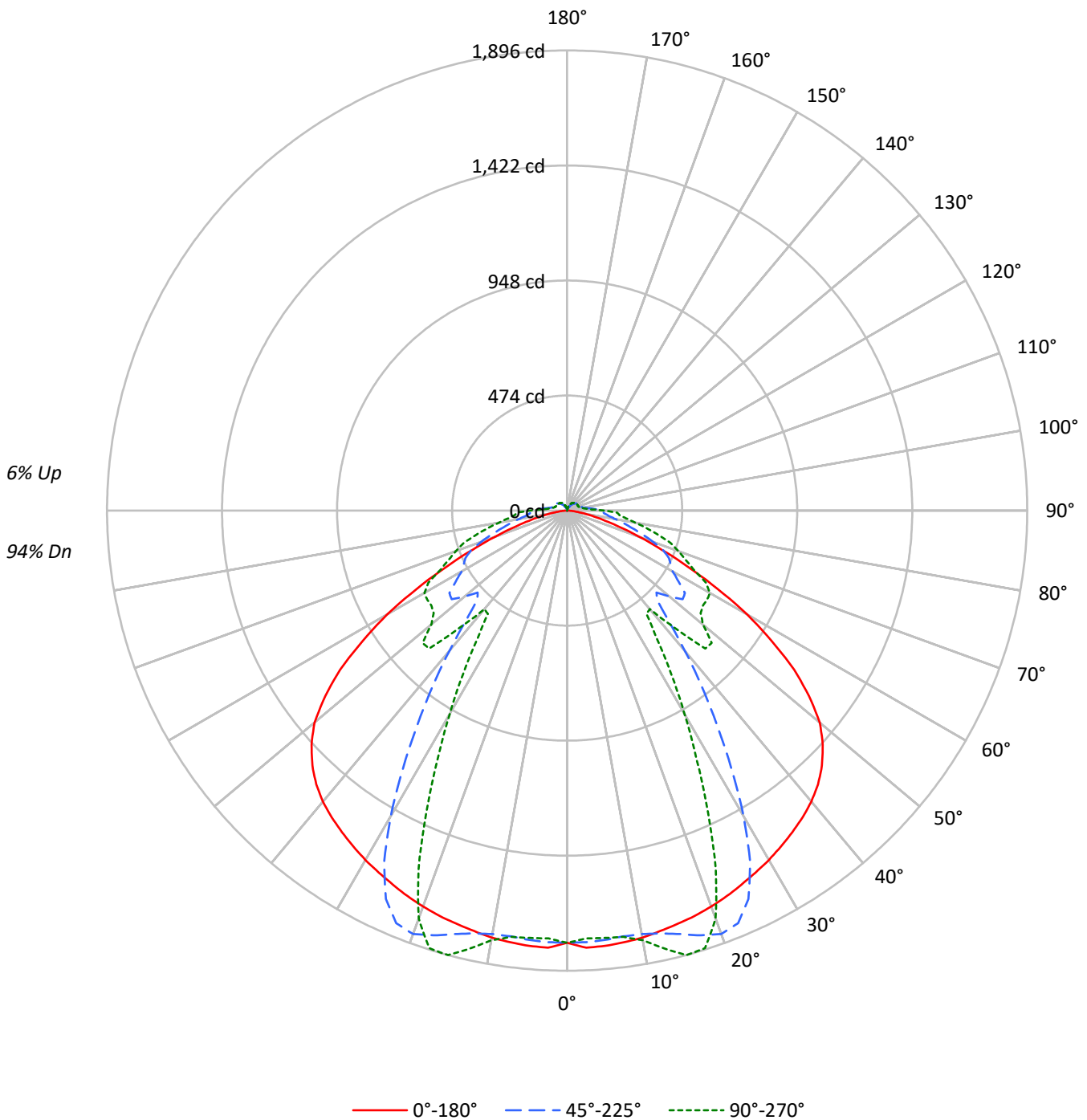
Lumens per Lamp: N/A  
Luminaire Lumens: 4574.0 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Spacing Criteria (0/90/45): 1.4 / 1 / 1.08  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 38  
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#

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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°  | 14389 | 14389 | 14389 |
| 5°  | 14564 | 14052 | 13880 |
| 10° | 14582 | 13838 | 13832 |
| 15° | 14623 | 14033 | 14416 |
| 20° | 14759 | 14451 | 13532 |
| 25° | 14942 | 13888 | 10419 |
| 30° | 15237 | 11632 | 7411  |
| 35° | 15615 | 8810  | 5018  |
| 40° | 16091 | 6404  | 4249  |
| 45° | 16457 | 4646  | 6681  |
| 50° | 16480 | 5144  | 6340  |
| 55° | 15403 | 5920  | 6261  |
| 60° | 13124 | 5417  | 6655  |
| 65° | 9874  | 5463  | 6087  |
| 70° | 6928  | 4974  | 5666  |
| 75° | 4541  | 4167  | 5085  |
| 80° | 2898  | 3570  | 4233  |
| 85° | 1564  | 3394  | 3800  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 169.4  | 3.7       |
| 10°-20°   | 511.6  | 11.2      |
| 20°-30°   | 743.2  | 16.2      |
| 30°-40°   | 710.1  | 15.5      |
| 40°-50°   | 649.5  | 14.2      |
| 50°-60°   | 599.7  | 13.1      |
| 60°-70°   | 476.4  | 10.4      |
| 70°-80°   | 294.0  | 6.4       |
| 80°-90°   | 160.1  | 3.5       |
| 90°-100°  | 80.9   | 1.8       |
| 100°-110° | 50.8   | 1.1       |
| 110°-120° | 43.1   | 0.9       |
| 120°-130° | 35.2   | 0.8       |
| 130°-140° | 25.2   | 0.6       |
| 140°-150° | 15.6   | 0.3       |
| 150°-160° | 7.4    | 0.2       |
| 160°-170° | 1.9    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 1424.1 | 31.1      |
| 0°-40°    | 2134.2 | 46.7      |
| 0°-60°    | 3383.4 | 74.0      |
| 0°-90°    | 4313.9 | 94.3      |
| 90°-120°  | 174.8  | 3.8       |
| 90°-150°  | 250.8  | 5.5       |
| 90°-180°  | 260.0  | 5.7       |
| 0°-180°   | 4574.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1781 | 1781  | 1781 | 1781  | 1781 |      |
| 5°   | 1800 | 1773  | 1776 | 1766  | 1767 | 171  |
| 15°  | 1762 | 1739  | 1807 | 1874  | 1896 | 499  |
| 25°  | 1700 | 1733  | 1766 | 1495  | 1373 | 786  |
| 35°  | 1618 | 1591  | 1073 | 739   | 642  | 1014 |
| 45°  | 1485 | 1036  | 523  | 668   | 804  | 1141 |
| 55°  | 1142 | 531   | 593  | 638   | 683  | 1006 |
| 65°  | 551  | 344   | 462  | 561   | 575  | 557  |
| 75°  | 162  | 184   | 277  | 366   | 391  | 184  |
| 85°  | 23   | 78    | 157  | 214   | 217  | 29   |
| 90°  | 1    | 58    | 140  | 166   | 154  | 1    |
| 95°  | 0    | 54    | 97   | 86    | 81   | 0    |
| 105° | 0    | 49    | 60   | 54    | 54   | 0    |
| 115° | 0    | 40    | 58   | 51    | 49   | 0    |
| 125° | 1    | 32    | 51   | 50    | 47   | 1    |
| 135° | 1    | 23    | 41   | 45    | 43   | 1    |
| 145° | 1    | 14    | 28   | 36    | 39   | 1    |
| 155° | 2    | 9     | 17   | 23    | 28   | 1    |
| 165° | 2    | 5     | 9    | 11    | 15   | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-49SL-SLC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1780.6 | 1780.6 | 1780.6 | 1780.6 | 1780.6 |
| 2.5°   | 1802.7 | 1776.7 | 1779.8 | 1774.3 | 1764.8 |
| 5°     | 1800.3 | 1772.7 | 1775.9 | 1766.4 | 1767.2 |
| 7.5°   | 1794.0 | 1765.6 | 1769.6 | 1768.0 | 1771.9 |
| 10°    | 1786.9 | 1757.0 | 1771.9 | 1785.3 | 1797.2 |
| 12.5°  | 1774.3 | 1747.5 | 1783.8 | 1823.2 | 1847.6 |
| 15°    | 1762.5 | 1738.8 | 1806.6 | 1873.6 | 1896.5 |
| 17.5°  | 1750.7 | 1735.7 | 1835.0 | 1893.3 | 1890.2 |
| 20°    | 1735.7 | 1734.1 | 1856.3 | 1836.6 | 1788.5 |
| 22.5°  | 1719.1 | 1734.9 | 1839.7 | 1695.5 | 1600.9 |
| 25°    | 1700.2 | 1733.3 | 1766.4 | 1495.3 | 1373.1 |
| 27.5°  | 1681.3 | 1726.2 | 1633.2 | 1276.1 | 1155.5 |
| 30°    | 1662.4 | 1707.3 | 1453.5 | 1075.9 | 966.4  |
| 32.5°  | 1640.3 | 1666.3 | 1258.0 | 898.6  | 797.7  |
| 35°    | 1617.5 | 1591.4 | 1072.8 | 738.6  | 642.4  |
| 37.5°  | 1593.8 | 1483.5 | 906.5  | 598.3  | 536.8  |
| 40°    | 1565.4 | 1347.9 | 753.5  | 513.1  | 529.7  |
| 42.5°  | 1530.0 | 1195.0 | 618.8  | 538.4  | 653.4  |
| 45°    | 1485.0 | 1035.7 | 523.4  | 667.6  | 804.0  |
| 47.5°  | 1428.3 | 882.8  | 499.7  | 764.6  | 807.1  |
| 50°    | 1359.7 | 742.5  | 549.4  | 733.1  | 729.9  |
| 52.5°  | 1255.7 | 625.9  | 599.8  | 668.4  | 693.6  |
| 55°    | 1142.1 | 531.3  | 592.7  | 637.7  | 682.6  |
| 57.5°  | 998.7  | 467.4  | 543.9  | 631.4  | 683.4  |
| 60°    | 856.0  | 424.9  | 502.1  | 630.6  | 679.5  |
| 62.5°  | 698.4  | 386.2  | 480.8  | 615.6  | 644.8  |
| 65°    | 551.0  | 344.5  | 461.9  | 561.2  | 574.6  |
| 67.5°  | 422.5  | 301.9  | 428.8  | 500.5  | 527.3  |
| 70°    | 318.4  | 260.1  | 376.8  | 454.0  | 487.1  |
| 72.5°  | 229.4  | 220.7  | 323.2  | 413.0  | 447.7  |
| 75°    | 162.4  | 183.7  | 276.7  | 366.5  | 391.0  |
| 77.5°  | 111.9  | 149.8  | 237.3  | 315.3  | 335.0  |
| 80°    | 73.3   | 119.8  | 201.8  | 271.2  | 284.6  |
| 82.5°  | 44.1   | 96.2   | 175.0  | 237.3  | 244.4  |
| 85°    | 22.9   | 78.0   | 156.9  | 213.6  | 216.8  |
| 87.5°  | 7.1    | 65.4   | 146.6  | 202.6  | 206.5  |
| 90°    | 0.8    | 58.3   | 140.3  | 166.3  | 153.7  |
| 92.5°  | 0.0    | 55.2   | 121.4  | 113.5  | 101.7  |
| 95°    | 0.0    | 54.4   | 97.0   | 85.9   | 81.2   |
| 97.5°  | 0.0    | 52.8   | 79.6   | 71.7   | 69.4   |
| 100°   | 0.0    | 51.2   | 68.6   | 63.1   | 62.3   |
| 102.5° | 0.0    | 50.4   | 62.3   | 57.5   | 56.8   |
| 105°   | 0.0    | 48.9   | 59.9   | 54.4   | 53.6   |
| 107.5° | 0.0    | 46.5   | 58.3   | 52.8   | 51.2   |
| 110°   | 0.0    | 44.1   | 58.3   | 52.0   | 49.7   |



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 41.8  | 58.3 | 51.2  | 48.9 |
| 115°   | 0.0 | 40.2  | 57.5 | 51.2  | 48.9 |
| 117.5° | 0.8 | 38.6  | 56.8 | 51.2  | 48.9 |
| 120°   | 0.0 | 37.0  | 55.2 | 51.2  | 48.1 |
| 122.5° | 0.8 | 34.7  | 53.6 | 50.4  | 48.1 |
| 125°   | 0.8 | 32.3  | 51.2 | 49.7  | 47.3 |
| 127.5° | 0.8 | 30.0  | 48.9 | 48.1  | 45.7 |
| 130°   | 0.8 | 27.6  | 46.5 | 47.3  | 44.9 |
| 132.5° | 0.8 | 25.2  | 43.4 | 45.7  | 44.1 |
| 135°   | 0.8 | 22.9  | 41.0 | 44.9  | 43.4 |
| 137.5° | 0.8 | 20.5  | 37.8 | 42.6  | 42.6 |
| 140°   | 0.8 | 18.1  | 34.7 | 41.0  | 41.8 |
| 142.5° | 0.8 | 16.6  | 31.5 | 39.4  | 40.2 |
| 145°   | 0.8 | 14.2  | 28.4 | 36.3  | 38.6 |
| 147.5° | 0.8 | 12.6  | 25.2 | 33.1  | 36.3 |
| 150°   | 0.8 | 11.0  | 22.1 | 30.0  | 33.1 |
| 152.5° | 0.8 | 9.5   | 19.7 | 26.0  | 30.7 |
| 155°   | 1.6 | 8.7   | 17.3 | 22.9  | 27.6 |
| 157.5° | 1.6 | 7.1   | 14.2 | 19.7  | 23.6 |
| 160°   | 1.6 | 6.3   | 12.6 | 16.6  | 21.3 |
| 162.5° | 1.6 | 5.5   | 10.2 | 14.2  | 18.1 |
| 165°   | 1.6 | 4.7   | 8.7  | 11.0  | 15.0 |
| 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)