

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-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-LD5-49SL-SLC-UNV-L930-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
CLEAR SQUARE LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

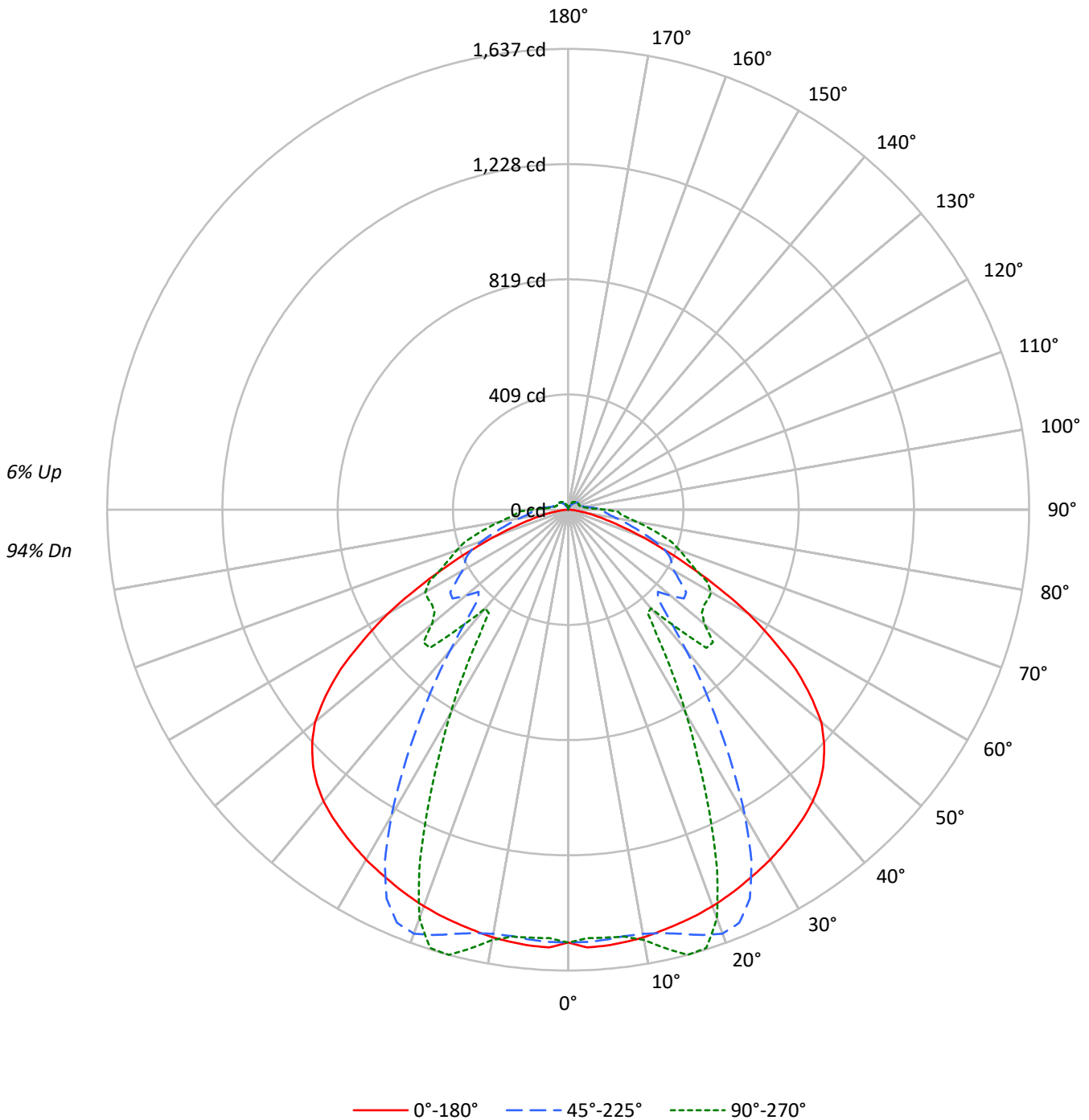
Lumens per Lamp: N/A  
Luminaire Lumens: 3949.0 lumens  
Efficiency: N/A  
Efficacy: 103.9 lumens/watt  
Spacing Criteria (0/90/45): 1.4 / 1 / 1.08  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

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





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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°  | 12423 | 12423 | 12423 |
| 5°  | 12574 | 12132 | 11983 |
| 10° | 12590 | 11947 | 11942 |
| 15° | 12625 | 12116 | 12446 |
| 20° | 12742 | 12476 | 11683 |
| 25° | 12900 | 11991 | 8996  |
| 30° | 13155 | 10043 | 6398  |
| 35° | 13481 | 7606  | 4332  |
| 40° | 13893 | 5529  | 3669  |
| 45° | 14208 | 4011  | 5767  |
| 50° | 14228 | 4441  | 5474  |
| 55° | 13299 | 5112  | 5405  |
| 60° | 11332 | 4677  | 5745  |
| 65° | 8525  | 4717  | 5255  |
| 70° | 5982  | 4294  | 4892  |
| 75° | 3920  | 3598  | 4389  |
| 80° | 2502  | 3082  | 3654  |
| 85° | 1346  | 2929  | 3279  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 146.3  | 3.7       |
| 10°-20°   | 441.7  | 11.2      |
| 20°-30°   | 641.6  | 16.2      |
| 30°-40°   | 613.0  | 15.5      |
| 40°-50°   | 560.8  | 14.2      |
| 50°-60°   | 517.8  | 13.1      |
| 60°-70°   | 411.3  | 10.4      |
| 70°-80°   | 253.8  | 6.4       |
| 80°-90°   | 138.2  | 3.5       |
| 90°-100°  | 69.9   | 1.8       |
| 100°-110° | 43.9   | 1.1       |
| 110°-120° | 37.2   | 0.9       |
| 120°-130° | 30.4   | 0.8       |
| 130°-140° | 21.8   | 0.6       |
| 140°-150° | 13.4   | 0.3       |
| 150°-160° | 6.4    | 0.2       |
| 160°-170° | 1.7    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 1229.5 | 31.1      |
| 0°-40°    | 1842.6 | 46.7      |
| 0°-60°    | 2921.1 | 74.0      |
| 0°-90°    | 3724.4 | 94.3      |
| 90°-120°  | 151.0  | 3.8       |
| 90°-150°  | 216.6  | 5.5       |
| 90°-180°  | 225.0  | 5.7       |
| 0°-180°   | 3949.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1537 | 1537  | 1537 | 1537  | 1537 |      |
| 5°   | 1554 | 1530  | 1533 | 1525  | 1526 | 148  |
| 15°  | 1522 | 1501  | 1560 | 1618  | 1637 | 431  |
| 25°  | 1468 | 1496  | 1525 | 1291  | 1186 | 678  |
| 35°  | 1396 | 1374  | 926  | 638   | 555  | 876  |
| 45°  | 1282 | 894   | 452  | 576   | 694  | 985  |
| 55°  | 986  | 459   | 512  | 550   | 589  | 868  |
| 65°  | 476  | 297   | 399  | 484   | 496  | 481  |
| 75°  | 140  | 159   | 239  | 316   | 338  | 159  |
| 85°  | 20   | 67    | 135  | 184   | 187  | 25   |
| 90°  | 1    | 50    | 121  | 144   | 133  | 1    |
| 95°  | 0    | 47    | 84   | 74    | 70   | 0    |
| 105° | 0    | 42    | 52   | 47    | 46   | 0    |
| 115° | 0    | 35    | 50   | 44    | 42   | 0    |
| 125° | 1    | 28    | 44   | 43    | 41   | 1    |
| 135° | 1    | 20    | 35   | 39    | 37   | 1    |
| 145° | 1    | 12    | 24   | 31    | 33   | 0    |
| 155° | 1    | 8     | 15   | 20    | 24   | 1    |
| 165° | 1    | 4     | 8    | 10    | 13   | 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-L930-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1537.3 | 1537.3 | 1537.3 | 1537.3 | 1537.3 |
| 2.5°   | 1556.4 | 1533.9 | 1536.6 | 1531.9 | 1523.7 |
| 5°     | 1554.3 | 1530.5 | 1533.2 | 1525.1 | 1525.7 |
| 7.5°   | 1548.9 | 1524.4 | 1527.8 | 1526.4 | 1529.8 |
| 10°    | 1542.8 | 1516.9 | 1529.8 | 1541.4 | 1551.6 |
| 12.5°  | 1531.9 | 1508.7 | 1540.0 | 1574.1 | 1595.2 |
| 15°    | 1521.7 | 1501.2 | 1559.8 | 1617.6 | 1637.3 |
| 17.5°  | 1511.4 | 1498.5 | 1584.3 | 1634.6 | 1631.9 |
| 20°    | 1498.5 | 1497.2 | 1602.6 | 1585.6 | 1544.1 |
| 22.5°  | 1484.2 | 1497.8 | 1588.3 | 1463.8 | 1382.1 |
| 25°    | 1467.9 | 1496.5 | 1525.1 | 1291.0 | 1185.5 |
| 27.5°  | 1451.6 | 1490.4 | 1410.0 | 1101.8 | 997.7  |
| 30°    | 1435.2 | 1474.0 | 1254.9 | 928.9  | 834.3  |
| 32.5°  | 1416.2 | 1438.6 | 1086.1 | 775.8  | 688.7  |
| 35°    | 1396.4 | 1374.0 | 926.2  | 637.7  | 554.6  |
| 37.5°  | 1376.0 | 1280.7 | 782.6  | 516.5  | 463.4  |
| 40°    | 1351.5 | 1163.7 | 650.6  | 443.0  | 457.3  |
| 42.5°  | 1320.9 | 1031.7 | 534.2  | 464.8  | 564.2  |
| 45°    | 1282.1 | 894.2  | 451.9  | 576.4  | 694.1  |
| 47.5°  | 1233.1 | 762.2  | 431.5  | 660.1  | 696.9  |
| 50°    | 1173.9 | 641.1  | 474.3  | 632.9  | 630.2  |
| 52.5°  | 1084.1 | 540.3  | 517.9  | 577.1  | 598.9  |
| 55°    | 986.1  | 458.7  | 511.8  | 550.5  | 589.3  |
| 57.5°  | 862.2  | 403.6  | 469.6  | 545.1  | 590.0  |
| 60°    | 739.1  | 366.8  | 433.5  | 544.4  | 586.6  |
| 62.5°  | 602.9  | 333.5  | 415.1  | 531.5  | 556.7  |
| 65°    | 475.7  | 297.4  | 398.8  | 484.5  | 496.1  |
| 67.5°  | 364.8  | 260.6  | 370.2  | 432.1  | 455.3  |
| 70°    | 274.9  | 224.6  | 325.3  | 392.0  | 420.6  |
| 72.5°  | 198.0  | 190.5  | 279.0  | 356.6  | 386.5  |
| 75°    | 140.2  | 158.6  | 238.9  | 316.4  | 337.5  |
| 77.5°  | 96.6   | 129.3  | 204.8  | 272.2  | 289.2  |
| 80°    | 63.3   | 103.4  | 174.2  | 234.1  | 245.7  |
| 82.5°  | 38.1   | 83.0   | 151.1  | 204.8  | 211.0  |
| 85°    | 19.7   | 67.4   | 135.4  | 184.4  | 187.1  |
| 87.5°  | 6.1    | 56.5   | 126.6  | 174.9  | 178.3  |
| 90°    | 0.7    | 50.4   | 121.1  | 143.6  | 132.7  |
| 92.5°  | 0.0    | 47.6   | 104.8  | 98.0   | 87.8   |
| 95°    | 0.0    | 47.0   | 83.7   | 74.2   | 70.1   |
| 97.5°  | 0.0    | 45.6   | 68.7   | 61.9   | 59.9   |
| 100°   | 0.0    | 44.2   | 59.2   | 54.4   | 53.8   |
| 102.5° | 0.0    | 43.6   | 53.8   | 49.7   | 49.0   |
| 105°   | 0.0    | 42.2   | 51.7   | 47.0   | 46.3   |
| 107.5° | 0.0    | 40.2   | 50.4   | 45.6   | 44.2   |
| 110°   | 0.0    | 38.1   | 50.4   | 44.9   | 42.9   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 36.1  | 50.4 | 44.2  | 42.2 |
| 115°   | 0.0 | 34.7  | 49.7 | 44.2  | 42.2 |
| 117.5° | 0.7 | 33.3  | 49.0 | 44.2  | 42.2 |
| 120°   | 0.0 | 32.0  | 47.6 | 44.2  | 41.5 |
| 122.5° | 0.7 | 29.9  | 46.3 | 43.6  | 41.5 |
| 125°   | 0.7 | 27.9  | 44.2 | 42.9  | 40.8 |
| 127.5° | 0.7 | 25.9  | 42.2 | 41.5  | 39.5 |
| 130°   | 0.7 | 23.8  | 40.2 | 40.8  | 38.8 |
| 132.5° | 0.7 | 21.8  | 37.4 | 39.5  | 38.1 |
| 135°   | 0.7 | 19.7  | 35.4 | 38.8  | 37.4 |
| 137.5° | 0.7 | 17.7  | 32.7 | 36.7  | 36.7 |
| 140°   | 0.7 | 15.7  | 29.9 | 35.4  | 36.1 |
| 142.5° | 0.7 | 14.3  | 27.2 | 34.0  | 34.7 |
| 145°   | 0.7 | 12.2  | 24.5 | 31.3  | 33.3 |
| 147.5° | 0.7 | 10.9  | 21.8 | 28.6  | 31.3 |
| 150°   | 0.7 | 9.5   | 19.1 | 25.9  | 28.6 |
| 152.5° | 0.7 | 8.2   | 17.0 | 22.5  | 26.5 |
| 155°   | 1.4 | 7.5   | 15.0 | 19.7  | 23.8 |
| 157.5° | 1.4 | 6.1   | 12.2 | 17.0  | 20.4 |
| 160°   | 1.4 | 5.4   | 10.9 | 14.3  | 18.4 |
| 162.5° | 1.4 | 4.8   | 8.8  | 12.2  | 15.7 |
| 165°   | 1.4 | 4.1   | 7.5  | 9.5   | 12.9 |
| 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)