

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: P233288

Luminaire Tested: **4VRVT3-LD5-6-G-UNV-L850-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233288  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4VRVT3-LD5-6-G-UNV-L850-CD1-U  
Description: 4FT VRVT3 GENERAL APPLICATION, 6000LM  
Light Source: (196) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6490.0 lumens  
Efficiency: N/A  
Efficacy: 127.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 1.04')  
CIE Type: Direct

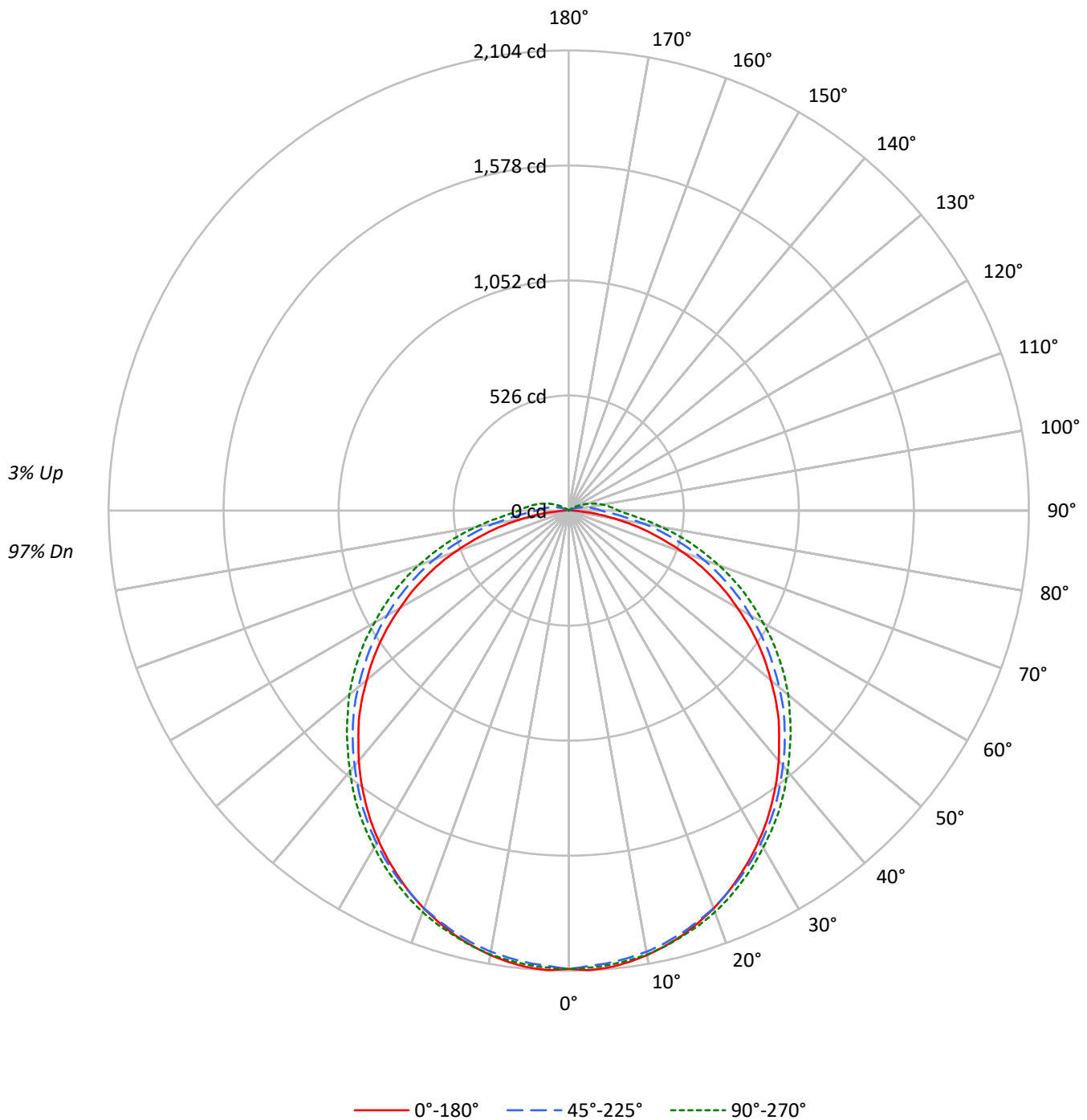
Input Watts (W): 51.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |  |    |    |    |
| 0   | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 |  | 109 | 109 | 109 |  | 104 | 104 | 104 |  | 99 | 99 | 99 |
| 1   | 107 | 102 | 97  | 93  | 104 | 99  | 95  | 91  |  | 94  | 91  | 88  |  | 90  | 87  | 84  |  | 86 | 83 | 81 |
| 2   | 97  | 88  | 81  | 75  | 94  | 86  | 79  | 74  |  | 82  | 76  | 72  |  | 78  | 73  | 69  |  | 75 | 71 | 67 |
| 3   | 88  | 77  | 69  | 62  | 85  | 75  | 67  | 61  |  | 72  | 65  | 60  |  | 69  | 63  | 58  |  | 66 | 61 | 57 |
| 4   | 81  | 68  | 59  | 52  | 78  | 67  | 58  | 52  |  | 64  | 56  | 51  |  | 61  | 55  | 49  |  | 58 | 53 | 48 |
| 5   | 74  | 61  | 52  | 45  | 72  | 59  | 51  | 44  |  | 57  | 49  | 44  |  | 55  | 48  | 43  |  | 52 | 47 | 42 |
| 6   | 68  | 55  | 46  | 39  | 66  | 54  | 45  | 39  |  | 51  | 44  | 38  |  | 49  | 43  | 37  |  | 47 | 42 | 37 |
| 7   | 63  | 49  | 41  | 34  | 61  | 49  | 40  | 34  |  | 47  | 39  | 34  |  | 45  | 38  | 33  |  | 43 | 37 | 33 |
| 8   | 59  | 45  | 36  | 31  | 57  | 44  | 36  | 30  |  | 43  | 35  | 30  |  | 41  | 34  | 30  |  | 40 | 34 | 29 |
| 9   | 55  | 41  | 33  | 27  | 53  | 41  | 33  | 27  |  | 39  | 32  | 27  |  | 38  | 31  | 27  |  | 37 | 31 | 26 |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  |  | 36  | 29  | 24  |  | 35  | 29  | 24  |  | 34 | 28 | 24 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13534 | 13534 | 13534 |
| 5°  | 13293 | 11500 | 11097 |
| 10° | 12941 | 9993  | 9380  |
| 15° | 12565 | 8778  | 8062  |
| 20° | 12156 | 7774  | 7030  |
| 25° | 11723 | 6912  | 6164  |
| 30° | 11285 | 6159  | 5428  |
| 35° | 10819 | 5489  | 4805  |
| 40° | 10331 | 4868  | 4236  |
| 45° | 9838  | 4318  | 3744  |
| 50° | 9250  | 3796  | 3308  |
| 55° | 8658  | 3305  | 2890  |
| 60° | 7930  | 2831  | 2484  |
| 65° | 7128  | 2384  | 2121  |
| 70° | 6093  | 1947  | 1752  |
| 75° | 4788  | 1491  | 1398  |
| 80° | 3197  | 1074  | 1047  |
| 85° | 1440  | 707   | 755   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 198.3  | 3.1       |
| 10°-20°   | 566.8  | 8.7       |
| 20°-30°   | 856.3  | 13.2      |
| 30°-40°   | 1031.6 | 15.9      |
| 40°-50°   | 1077.7 | 16.6      |
| 50°-60°   | 995.6  | 15.3      |
| 60°-70°   | 798.2  | 12.3      |
| 70°-80°   | 517.1  | 8.0       |
| 80°-90°   | 238.9  | 3.7       |
| 90°-100°  | 117.8  | 1.8       |
| 100°-110° | 62.9   | 1.0       |
| 110°-120° | 24.4   | 0.4       |
| 120°-130° | 4.5    | 0.1       |
| 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°    | 1621.3 | 25.0      |
| 0°-40°    | 2652.9 | 40.9      |
| 0°-60°    | 4726.1 | 72.8      |
| 0°-90°    | 6280.3 | 96.8      |
| 90°-120°  | 205.1  | 3.2       |
| 90°-150°  | 209.7  | 3.2       |
| 90°-180°  | 210.0  | 3.2       |
| 0°-180°   | 6490.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2096 | 2096  | 2096 | 2096  | 2096 |      |
| 5°   | 2097 | 2091  | 2077 | 2089  | 2086 | 199  |
| 15°  | 2010 | 2009  | 1999 | 2015  | 2014 | 567  |
| 25°  | 1845 | 1850  | 1853 | 1870  | 1873 | 850  |
| 35°  | 1622 | 1634  | 1648 | 1667  | 1676 | 1015 |
| 45°  | 1358 | 1373  | 1396 | 1422  | 1435 | 1045 |
| 55°  | 1055 | 1078  | 1112 | 1153  | 1173 | 942  |
| 65°  | 727  | 749   | 809  | 861   | 883  | 719  |
| 75°  | 378  | 426   | 495  | 555   | 579  | 401  |
| 85°  | 77   | 142   | 222  | 281   | 301  | 93   |
| 90°  | 17   | 71    | 148  | 207   | 227  | 12   |
| 95°  | 11   | 44    | 114  | 170   | 191  | 9    |
| 105° | 5    | 10    | 57   | 104   | 123  | 6    |
| 115° | 2    | 2     | 16   | 46    | 60   | 2    |
| 125° | 2    | 0     | 0    | 8     | 14   | 1    |
| 135° | 0    | 0     | 0    | 0     | 0    | 0    |
| 145° | 0    | 0     | 0    | 0     | 0    | 0    |
| 155° | 0    | 0     | 0    | 0     | 0    | 0    |
| 165° | 0    | 0     | 0    | 0     | 0    | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2095.6 | 2095.6 | 2095.6 | 2095.6 | 2095.6 |
| 2.5°   | 2103.5 | 2097.2 | 2084.5 | 2095.6 | 2092.4 |
| 5°     | 2097.2 | 2090.9 | 2076.7 | 2089.3 | 2086.1 |
| 7.5°   | 2083.0 | 2076.7 | 2064.0 | 2078.2 | 2075.1 |
| 10°    | 2064.0 | 2059.3 | 2048.3 | 2060.9 | 2060.9 |
| 12.5°  | 2038.8 | 2037.2 | 2026.2 | 2040.4 | 2040.4 |
| 15°    | 2010.4 | 2008.9 | 1999.4 | 2015.2 | 2013.6 |
| 17.5°  | 1974.2 | 1975.7 | 1967.9 | 1983.6 | 1986.8 |
| 20°    | 1936.3 | 1936.3 | 1934.7 | 1950.5 | 1953.7 |
| 22.5°  | 1893.8 | 1895.3 | 1893.8 | 1912.7 | 1915.8 |
| 25°    | 1844.9 | 1849.6 | 1852.8 | 1870.1 | 1873.3 |
| 27.5°  | 1794.4 | 1800.7 | 1807.0 | 1824.4 | 1829.1 |
| 30°    | 1740.8 | 1745.5 | 1756.6 | 1775.5 | 1778.6 |
| 32.5°  | 1684.0 | 1693.5 | 1703.0 | 1721.9 | 1728.2 |
| 35°    | 1622.5 | 1633.6 | 1647.8 | 1666.7 | 1676.2 |
| 37.5°  | 1559.5 | 1572.1 | 1584.7 | 1609.9 | 1617.8 |
| 40°    | 1493.2 | 1507.4 | 1523.2 | 1546.9 | 1556.3 |
| 42.5°  | 1423.9 | 1442.8 | 1461.7 | 1486.9 | 1494.8 |
| 45°    | 1357.6 | 1373.4 | 1395.5 | 1422.3 | 1434.9 |
| 47.5°  | 1283.5 | 1304.0 | 1329.3 | 1357.6 | 1370.2 |
| 50°    | 1206.3 | 1228.3 | 1256.7 | 1289.8 | 1310.3 |
| 52.5°  | 1132.2 | 1154.2 | 1182.6 | 1223.6 | 1242.5 |
| 55°    | 1054.9 | 1078.5 | 1111.7 | 1152.6 | 1173.1 |
| 57.5°  | 974.5  | 999.7  | 1036.0 | 1081.7 | 1102.2 |
| 60°    | 890.9  | 917.7  | 960.3  | 1010.7 | 1024.9 |
| 62.5°  | 812.1  | 837.3  | 886.2  | 935.0  | 955.5  |
| 65°    | 726.9  | 749.0  | 808.9  | 860.9  | 883.0  |
| 67.5°  | 643.3  | 668.6  | 731.6  | 788.4  | 807.3  |
| 70°    | 553.5  | 585.0  | 656.0  | 708.0  | 730.1  |
| 72.5°  | 463.6  | 501.4  | 575.5  | 632.3  | 652.8  |
| 75°    | 378.4  | 425.7  | 495.1  | 555.0  | 578.7  |
| 77.5°  | 296.4  | 345.3  | 424.2  | 479.4  | 503.0  |
| 80°    | 212.9  | 271.2  | 348.5  | 405.2  | 427.3  |
| 82.5°  | 141.9  | 201.8  | 279.1  | 339.0  | 362.7  |
| 85°    | 77.3   | 141.9  | 222.3  | 280.7  | 301.2  |
| 87.5°  | 36.3   | 99.3   | 175.0  | 233.4  | 257.0  |
| 90°    | 17.3   | 71.0   | 148.2  | 206.6  | 227.1  |
| 92.5°  | 14.2   | 55.2   | 130.9  | 187.6  | 209.7  |
| 95°    | 11.0   | 44.2   | 113.5  | 170.3  | 190.8  |
| 97.5°  | 9.5    | 31.5   | 99.3   | 153.0  | 175.0  |
| 100°   | 7.9    | 22.1   | 83.6   | 137.2  | 156.1  |
| 102.5° | 6.3    | 14.2   | 69.4   | 121.4  | 140.3  |
| 105°   | 4.7    | 9.5    | 56.8   | 104.1  | 123.0  |
| 107.5° | 4.7    | 4.7    | 45.7   | 88.3   | 107.2  |
| 110°   | 3.2    | 3.2    | 33.1   | 74.1   | 89.9   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 3.2 | 3.2   | 23.7 | 59.9  | 74.1 |
| 115°   | 1.6 | 1.6   | 15.8 | 45.7  | 59.9 |
| 117.5° | 1.6 | 1.6   | 9.5  | 34.7  | 45.7 |
| 120°   | 1.6 | 1.6   | 4.7  | 23.7  | 34.7 |
| 122.5° | 1.6 | 1.6   | 1.6  | 15.8  | 23.7 |
| 125°   | 1.6 | 0.0   | 0.0  | 7.9   | 14.2 |
| 127.5° | 0.0 | 0.0   | 0.0  | 3.2   | 7.9  |
| 130°   | 0.0 | 0.0   | 0.0  | 0.0   | 1.6  |
| 132.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 135°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 137.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 140°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 142.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 145°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 147.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 150°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 152.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 155°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 157.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 160°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 162.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 165°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 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)