

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: P233290

Luminaire Tested: **4VT3-LD5-8-G-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233290  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-3)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4VT3-LD5-8-G-UNV-L840-CD1-U  
Description: 4FT VT3 GENERAL APPLICATION, 8000LM  
Light Source: (392) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

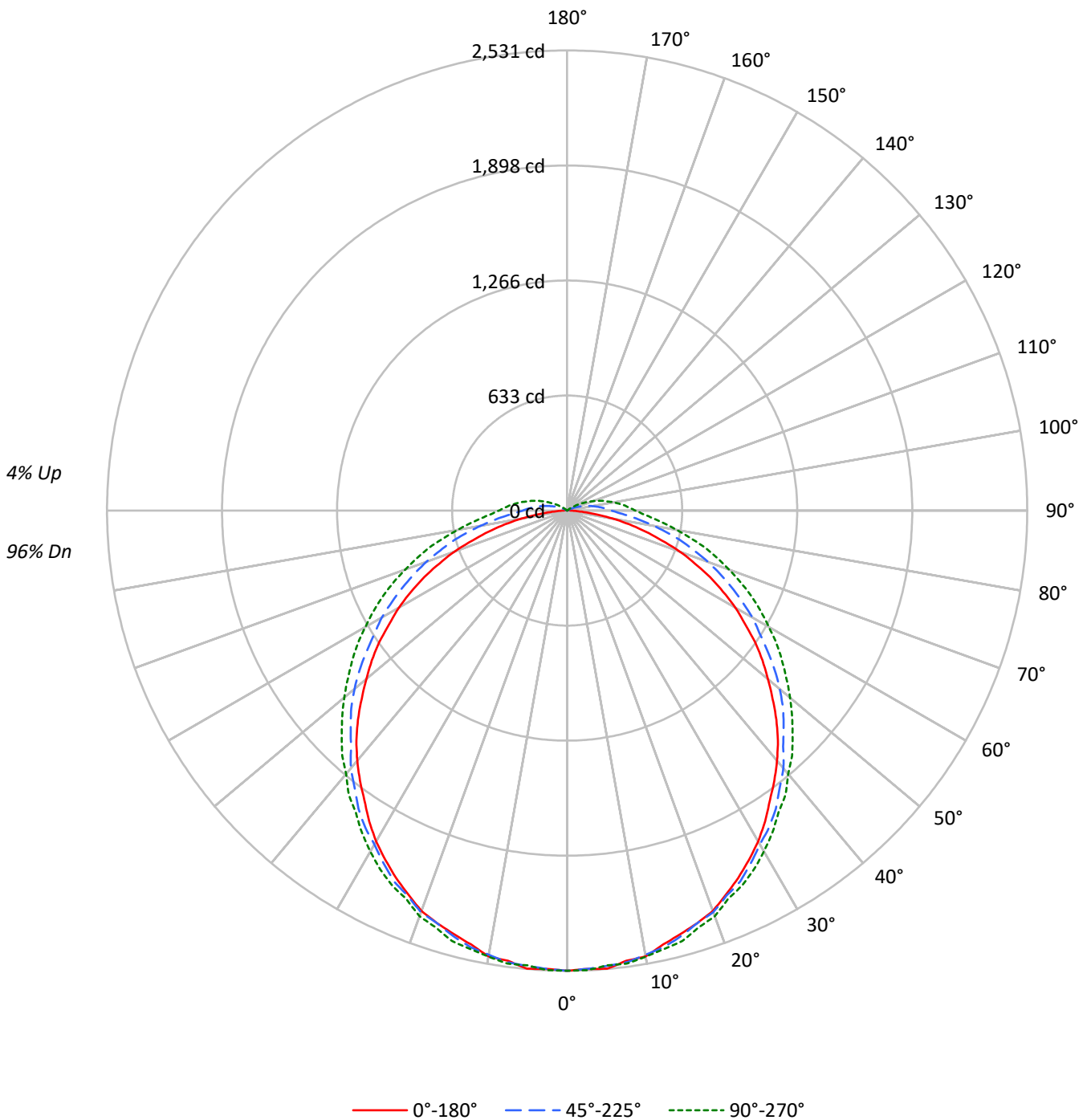
Lumens per Lamp: N/A  
Luminaire Lumens: 8081.0 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 1.04')  
CIE Type: Direct

Input Watts (W): 67.1  
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 | 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 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 103 | 103 | 103 | 98 | 98 | 98 | 96 |
| 1   | 106 | 101 | 96  | 92  | 103 | 98  | 94  | 90  | 93  | 90  | 86  | 89  | 86  | 83  | 84 | 82 | 80 | 77 |
| 2   | 96  | 87  | 80  | 74  | 93  | 85  | 78  | 73  | 81  | 75  | 70  | 77  | 72  | 68  | 73 | 69 | 66 | 63 |
| 3   | 87  | 76  | 68  | 61  | 85  | 74  | 66  | 60  | 71  | 64  | 58  | 67  | 62  | 57  | 64 | 59 | 55 | 53 |
| 4   | 80  | 67  | 58  | 51  | 77  | 66  | 57  | 51  | 63  | 55  | 50  | 60  | 54  | 48  | 57 | 52 | 47 | 45 |
| 5   | 73  | 60  | 51  | 44  | 71  | 59  | 50  | 44  | 56  | 48  | 43  | 54  | 47  | 42  | 51 | 46 | 41 | 39 |
| 6   | 68  | 54  | 45  | 38  | 65  | 53  | 44  | 38  | 51  | 43  | 37  | 48  | 42  | 37  | 46 | 41 | 36 | 34 |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 39  | 33  | 46  | 38  | 33  | 44  | 37  | 32  | 42 | 36 | 32 | 30 |
| 8   | 58  | 45  | 36  | 30  | 57  | 44  | 35  | 30  | 42  | 35  | 29  | 40  | 34  | 29  | 39 | 33 | 28 | 26 |
| 9   | 55  | 41  | 33  | 27  | 53  | 40  | 32  | 27  | 39  | 31  | 26  | 37  | 31  | 26  | 36 | 30 | 26 | 24 |
| 10  | 51  | 38  | 30  | 24  | 50  | 37  | 29  | 24  | 36  | 29  | 24  | 35  | 28  | 24  | 33 | 28 | 23 | 21 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16346 | 16346 | 16346 |
| 5°  | 16030 | 13921 | 13357 |
| 10° | 15612 | 12104 | 11338 |
| 15° | 15069 | 10637 | 9814  |
| 20° | 14709 | 9447  | 8543  |
| 25° | 14158 | 8397  | 7489  |
| 30° | 13620 | 7433  | 6608  |
| 35° | 12963 | 6666  | 5810  |
| 40° | 12426 | 5916  | 5147  |
| 45° | 11790 | 5207  | 4575  |
| 50° | 11057 | 4613  | 4042  |
| 55° | 10358 | 3998  | 3558  |
| 60° | 9525  | 3470  | 3107  |
| 65° | 8501  | 2938  | 2691  |
| 70° | 7265  | 2445  | 2273  |
| 75° | 5657  | 1964  | 1891  |
| 80° | 3829  | 1488  | 1500  |
| 85° | 1696  | 1078  | 1183  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 239.1  | 3.0       |
| 10°-20°   | 683.8  | 8.5       |
| 20°-30°   | 1035.6 | 12.8      |
| 30°-40°   | 1248.0 | 15.4      |
| 40°-50°   | 1303.4 | 16.1      |
| 50°-60°   | 1210.3 | 15.0      |
| 60°-70°   | 987.2  | 12.2      |
| 70°-80°   | 670.6  | 8.3       |
| 80°-90°   | 356.0  | 4.4       |
| 90°-100°  | 194.6  | 2.4       |
| 100°-110° | 104.3  | 1.3       |
| 110°-120° | 40.9   | 0.5       |
| 120°-130° | 7.0    | 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°    | 1958.6 | 24.2      |
| 0°-40°    | 3206.6 | 39.7      |
| 0°-60°    | 5720.3 | 70.8      |
| 0°-90°    | 7734.2 | 95.7      |
| 90°-120°  | 339.8  | 4.2       |
| 90°-150°  | 346.8  | 4.3       |
| 90°-180°  | 347.0  | 4.3       |
| 0°-180°   | 8081.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2531 | 2531  | 2531 | 2531  | 2531 |      |
| 5°   | 2529 | 2499  | 2514 | 2523  | 2511 | 239  |
| 15°  | 2411 | 2420  | 2423 | 2426  | 2451 | 682  |
| 25°  | 2228 | 2234  | 2251 | 2258  | 2276 | 1027 |
| 35°  | 1944 | 1964  | 2001 | 2028  | 2027 | 1220 |
| 45°  | 1627 | 1649  | 1683 | 1731  | 1753 | 1254 |
| 55°  | 1262 | 1297  | 1345 | 1416  | 1444 | 1125 |
| 65°  | 867  | 909   | 997  | 1089  | 1120 | 856  |
| 75°  | 447  | 522   | 652  | 745   | 783  | 474  |
| 85°  | 91   | 204   | 339  | 438   | 472  | 110  |
| 90°  | 22   | 116   | 244  | 342   | 375  | 14   |
| 95°  | 14   | 69    | 190  | 282   | 319  | 11   |
| 105° | 7    | 13    | 95   | 174   | 206  | 7    |
| 115° | 3    | 2     | 26   | 79    | 101  | 3    |
| 125° | 1    | 0     | 0    | 14    | 24   | 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    |



TEST NUMBER: P233290

CATALOG NUMBER: 4VT3-LD5-8-G-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°   | 22.5° | 45°  | 67.5° | 90°  |
|--------|------|-------|------|-------|------|
| 0°     | 2531 | 2531  | 2531 | 2531  | 2531 |
| 2.5°   | 2523 | 2542  | 2523 | 2521  | 2530 |
| 5°     | 2529 | 2499  | 2514 | 2523  | 2511 |
| 7.5°   | 2497 | 2511  | 2506 | 2496  | 2513 |
| 10°    | 2490 | 2470  | 2481 | 2477  | 2491 |
| 12.5°  | 2444 | 2441  | 2459 | 2450  | 2469 |
| 15°    | 2411 | 2420  | 2423 | 2426  | 2451 |
| 17.5°  | 2379 | 2384  | 2379 | 2388  | 2404 |
| 20°    | 2343 | 2328  | 2351 | 2357  | 2374 |
| 22.5°  | 2285 | 2287  | 2292 | 2315  | 2312 |
| 25°    | 2228 | 2234  | 2251 | 2258  | 2276 |
| 27.5°  | 2166 | 2164  | 2187 | 2207  | 2225 |
| 30°    | 2101 | 2109  | 2120 | 2161  | 2165 |
| 32.5°  | 2027 | 2033  | 2067 | 2090  | 2101 |
| 35°    | 1944 | 1964  | 2001 | 2028  | 2027 |
| 37.5°  | 1872 | 1891  | 1920 | 1953  | 1972 |
| 40°    | 1796 | 1812  | 1851 | 1882  | 1891 |
| 42.5°  | 1716 | 1730  | 1759 | 1805  | 1831 |
| 45°    | 1627 | 1649  | 1683 | 1731  | 1753 |
| 47.5°  | 1533 | 1567  | 1611 | 1651  | 1678 |
| 50°    | 1442 | 1476  | 1527 | 1574  | 1601 |
| 52.5°  | 1354 | 1387  | 1439 | 1499  | 1521 |
| 55°    | 1262 | 1297  | 1345 | 1416  | 1444 |
| 57.5°  | 1158 | 1198  | 1255 | 1345  | 1367 |
| 60°    | 1070 | 1099  | 1177 | 1258  | 1282 |
| 62.5°  | 967  | 1013  | 1086 | 1178  | 1202 |
| 65°    | 867  | 909   | 997  | 1089  | 1120 |
| 67.5°  | 760  | 811   | 909  | 1001  | 1034 |
| 70°    | 660  | 713   | 824  | 915   | 947  |
| 72.5°  | 545  | 617   | 733  | 834   | 865  |
| 75°    | 447  | 522   | 652  | 745   | 783  |
| 77.5°  | 349  | 437   | 567  | 661   | 692  |
| 80°    | 255  | 350   | 483  | 586   | 612  |
| 82.5°  | 163  | 274   | 408  | 506   | 536  |
| 85°    | 91   | 204   | 339  | 438   | 472  |
| 87.5°  | 44   | 153   | 283  | 384   | 415  |
| 90°    | 22   | 116   | 244  | 342   | 375  |
| 92.5°  | 17   | 92    | 217  | 312   | 343  |
| 95°    | 14   | 69    | 190  | 282   | 319  |
| 97.5°  | 12   | 52    | 165  | 257   | 288  |
| 100°   | 9    | 35    | 140  | 228   | 261  |
| 102.5° | 8    | 23    | 118  | 201   | 229  |
| 105°   | 7    | 13    | 95   | 174   | 206  |
| 107.5° | 5    | 7     | 75   | 150   | 179  |
| 110°   | 4    | 5     | 57   | 124   | 152  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|----|-------|-----|-------|-----|
| 112.5° | 4  | 4     | 40  | 101   | 125 |
| 115°   | 3  | 2     | 26  | 79    | 101 |
| 117.5° | 2  | 2     | 14  | 59    | 79  |
| 120°   | 1  | 1     | 5   | 40    | 58  |
| 122.5° | 1  | 1     | 1   | 26    | 39  |
| 125°   | 1  | 0     | 0   | 14    | 24  |
| 127.5° | 1  | 0     | 0   | 3     | 11  |
| 130°   | 1  | 0     | 0   | 0     | 2   |
| 132.5° | 0  | 0     | 0   | 0     | 0   |
| 135°   | 0  | 0     | 0   | 0     | 0   |
| 137.5° | 0  | 0     | 0   | 0     | 0   |
| 140°   | 0  | 0     | 0   | 0     | 0   |
| 142.5° | 0  | 0     | 0   | 0     | 0   |
| 145°   | 0  | 0     | 0   | 0     | 0   |
| 147.5° | 0  | 0     | 0   | 0     | 0   |
| 150°   | 0  | 0     | 0   | 0     | 0   |
| 152.5° | 0  | 0     | 0   | 0     | 0   |
| 155°   | 0  | 0     | 0   | 0     | 0   |
| 157.5° | 0  | 0     | 0   | 0     | 0   |
| 160°   | 0  | 0     | 0   | 0     | 0   |
| 162.5° | 0  | 0     | 0   | 0     | 0   |
| 165°   | 0  | 0     | 0   | 0     | 0   |
| 167.5° | 0  | 0     | 0   | 0     | 0   |
| 170°   | 0  | 0     | 0   | 0     | 0   |
| 172.5° | 0  | 0     | 0   | 0     | 0   |
| 175°   | 0  | 0     | 0   | 0     | 0   |
| 177.5° | 0  | 0     | 0   | 0     | 0   |
| 180°   | 0  | 0     | 0   | 0     | 0   |

(END OF REPORT)