

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: P237803

Luminaire Tested: **4VT2-LD5-4-FR50-UNV-L835-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237803
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4VT2-LD5-4-FR50-UNV-L835-CD1-WL-U
Description: METALUX VT2 LED LUMINAIRE
FROSTED LENS/15% DR HIGH IMPACT ADDITIVE STANDARD DISTRIBUTION
4FT FIXTURE
Light Source: (112) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4100.0 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

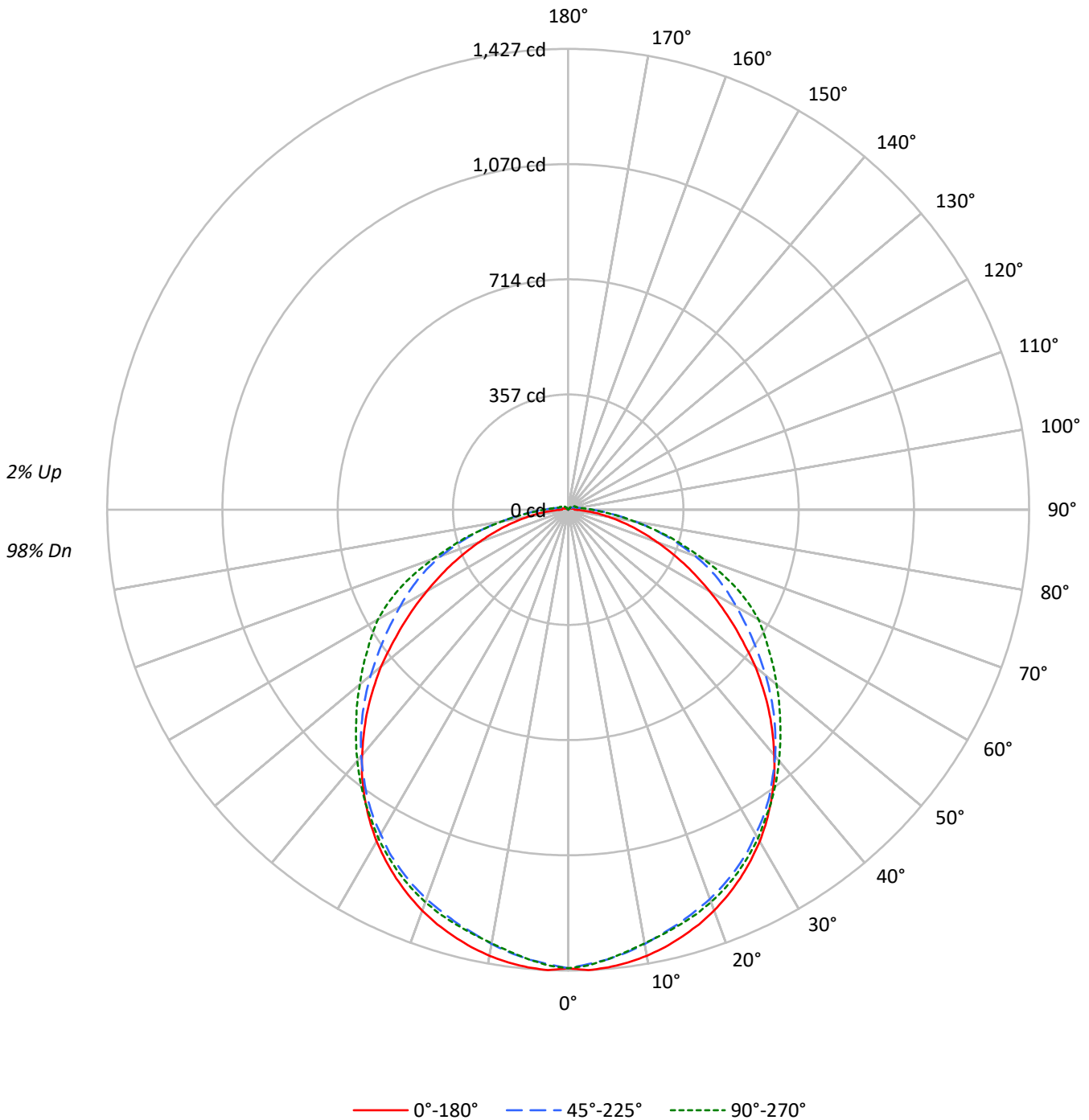
Input Watts (W): 29.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 108 | 103 | 98 | 94 | 105 | 100 | 96 | 92 | 95 | 92 | 89 | 91 | 88 | 86 | 87 | 85 | 83 | 80 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 83 | 78 | 73 | 79 | 75 | 71 | 76 | 72 | 69 | 67 |
| 3 | 89 | 78 | 70 | 63 | 86 | 76 | 69 | 62 | 73 | 66 | 61 | 70 | 64 | 60 | 67 | 62 | 58 | 56 |
| 4 | 81 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 58 | 52 | 62 | 56 | 51 | 60 | 54 | 50 | 48 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 58 | 51 | 45 | 56 | 49 | 44 | 54 | 48 | 43 | 41 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 39 | 51 | 44 | 39 | 49 | 43 | 38 | 36 |
| 7 | 64 | 50 | 42 | 35 | 62 | 50 | 41 | 35 | 48 | 40 | 35 | 46 | 39 | 34 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 32 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 30 | 28 |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7336 | 7336 | 7336 |
| 5° | 7352 | 7086 | 7044 |
| 10° | 7307 | 6846 | 6754 |
| 15° | 7238 | 6626 | 6536 |
| 20° | 7158 | 6435 | 6340 |
| 25° | 7049 | 6237 | 6122 |
| 30° | 6916 | 6008 | 5880 |
| 35° | 6727 | 5776 | 5617 |
| 40° | 6475 | 5504 | 5353 |
| 45° | 6173 | 5207 | 5086 |
| 50° | 5803 | 4878 | 4843 |
| 55° | 5340 | 4550 | 4628 |
| 60° | 4888 | 4264 | 4456 |
| 65° | 4446 | 4016 | 4096 |
| 70° | 3965 | 3656 | 3499 |
| 75° | 3552 | 3137 | 2877 |
| 80° | 3063 | 2500 | 2132 |
| 85° | 2555 | 1883 | 1515 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 133.2 | 3.2 |
| 10°-20° | 378.0 | 9.2 |
| 20°-30° | 570.4 | 13.9 |
| 30°-40° | 680.6 | 16.6 |
| 40°-50° | 694.0 | 16.9 |
| 50°-60° | 621.3 | 15.2 |
| 60°-70° | 491.1 | 12.0 |
| 70°-80° | 303.9 | 7.4 |
| 80°-90° | 127.9 | 3.1 |
| 90°-100° | 45.6 | 1.1 |
| 100°-110° | 24.2 | 0.6 |
| 110°-120° | 15.9 | 0.4 |
| 120°-130° | 9.2 | 0.2 |
| 130°-140° | 4.1 | 0.1 |
| 140°-150° | 0.6 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1081.6 | 26.4 |
| 0°-40° | 1762.2 | 43.0 |
| 0°-60° | 3077.6 | 75.1 |
| 0°-90° | 4000.5 | 97.6 |
| 90°-120° | 85.6 | 2.1 |
| 90°-150° | 99.5 | 2.4 |
| 90°-180° | 100.0 | 2.4 |
| 0°-180° | 4100.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1420 | 1420 | 1420 | 1420 | 1420 | |
| 5° | 1422 | 1412 | 1398 | 1402 | 1398 | 135 |
| 15° | 1368 | 1346 | 1326 | 1334 | 1331 | 386 |
| 25° | 1260 | 1233 | 1229 | 1242 | 1241 | 580 |
| 35° | 1096 | 1076 | 1085 | 1098 | 1098 | 685 |
| 45° | 879 | 872 | 901 | 923 | 928 | 676 |
| 55° | 627 | 641 | 696 | 745 | 758 | 561 |
| 65° | 395 | 422 | 514 | 567 | 575 | 392 |
| 75° | 204 | 247 | 312 | 324 | 323 | 218 |
| 85° | 63 | 98 | 128 | 128 | 123 | 65 |
| 90° | 21 | 51 | 76 | 77 | 74 | 14 |
| 95° | 19 | 29 | 47 | 49 | 47 | 15 |
| 105° | 15 | 14 | 25 | 29 | 28 | 16 |
| 115° | 8 | 7 | 17 | 23 | 23 | 8 |
| 125° | 3 | 2 | 11 | 17 | 19 | 3 |
| 135° | 1 | 1 | 4 | 9 | 11 | 1 |
| 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: P237803

CATALOG NUMBER: 4VT2-LD5-4-FR50-UNV-L835-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1419.8 | 1419.8 | 1419.8 | 1419.8 | 1419.8 |
| 2.5° | 1427.2 | 1419.2 | 1408.5 | 1415.8 | 1412.5 |
| 5° | 1422.5 | 1411.8 | 1397.8 | 1402.5 | 1397.8 |
| 7.5° | 1414.5 | 1401.1 | 1383.1 | 1385.1 | 1380.4 |
| 10° | 1402.5 | 1386.4 | 1365.7 | 1367.7 | 1363.0 |
| 12.5° | 1387.1 | 1367.7 | 1345.0 | 1352.3 | 1347.7 |
| 15° | 1367.7 | 1345.7 | 1326.3 | 1334.3 | 1331.0 |
| 17.5° | 1346.3 | 1322.3 | 1304.2 | 1316.9 | 1314.3 |
| 20° | 1320.9 | 1294.2 | 1282.9 | 1294.9 | 1292.9 |
| 22.5° | 1292.2 | 1263.5 | 1257.5 | 1270.8 | 1268.8 |
| 25° | 1259.5 | 1232.7 | 1228.7 | 1242.1 | 1240.8 |
| 27.5° | 1224.1 | 1196.0 | 1198.0 | 1209.4 | 1208.7 |
| 30° | 1186.0 | 1161.3 | 1160.6 | 1176.0 | 1175.3 |
| 32.5° | 1143.2 | 1118.5 | 1125.2 | 1137.2 | 1135.2 |
| 35° | 1096.4 | 1076.4 | 1085.1 | 1098.4 | 1098.4 |
| 37.5° | 1047.7 | 1029.0 | 1040.3 | 1054.3 | 1057.7 |
| 40° | 992.2 | 978.2 | 996.9 | 1013.6 | 1015.6 |
| 42.5° | 936.1 | 926.7 | 949.4 | 968.2 | 972.2 |
| 45° | 878.6 | 871.9 | 900.7 | 923.4 | 928.1 |
| 47.5° | 817.2 | 817.2 | 849.9 | 877.3 | 886.0 |
| 50° | 756.4 | 756.4 | 797.8 | 831.9 | 841.9 |
| 52.5° | 688.9 | 698.2 | 745.7 | 786.4 | 801.1 |
| 55° | 626.7 | 640.8 | 695.5 | 745.0 | 758.4 |
| 57.5° | 565.3 | 582.6 | 646.8 | 704.2 | 719.6 |
| 60° | 505.8 | 529.2 | 601.3 | 662.8 | 680.2 |
| 62.5° | 449.7 | 474.4 | 557.9 | 618.0 | 630.1 |
| 65° | 394.9 | 422.3 | 514.5 | 567.3 | 574.6 |
| 67.5° | 342.1 | 377.5 | 469.0 | 509.1 | 511.8 |
| 70° | 291.3 | 332.7 | 417.6 | 447.7 | 443.7 |
| 72.5° | 247.2 | 288.6 | 364.8 | 385.5 | 378.8 |
| 75° | 204.5 | 247.2 | 312.0 | 324.1 | 323.4 |
| 77.5° | 164.4 | 206.5 | 260.6 | 267.3 | 260.6 |
| 80° | 126.3 | 168.4 | 209.8 | 213.1 | 207.1 |
| 82.5° | 94.2 | 130.3 | 165.0 | 167.0 | 163.7 |
| 85° | 62.8 | 98.2 | 127.6 | 128.3 | 122.9 |
| 87.5° | 38.1 | 71.5 | 97.6 | 98.9 | 94.9 |
| 90° | 20.7 | 51.4 | 76.2 | 76.8 | 74.2 |
| 92.5° | 19.4 | 37.4 | 58.8 | 60.1 | 58.8 |
| 95° | 18.7 | 28.7 | 47.4 | 48.8 | 47.4 |
| 97.5° | 18.7 | 23.4 | 38.8 | 40.8 | 39.4 |
| 100° | 17.4 | 19.4 | 32.7 | 34.7 | 34.1 |
| 102.5° | 16.7 | 16.0 | 28.7 | 31.4 | 30.1 |
| 105° | 14.7 | 14.0 | 25.4 | 28.7 | 28.1 |
| 107.5° | 13.4 | 12.0 | 23.4 | 26.7 | 26.1 |
| 110° | 11.4 | 10.7 | 21.4 | 25.4 | 25.4 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 9.4 | 8.7 | 19.4 | 24.1 | 24.1 |
| 115° | 8.0 | 7.3 | 17.4 | 23.4 | 23.4 |
| 117.5° | 6.7 | 6.0 | 16.0 | 22.0 | 22.7 |
| 120° | 5.3 | 4.7 | 14.0 | 20.0 | 21.4 |
| 122.5° | 4.7 | 3.3 | 12.0 | 18.7 | 20.0 |
| 125° | 3.3 | 2.0 | 10.7 | 16.7 | 18.7 |
| 127.5° | 2.7 | 2.0 | 8.7 | 14.7 | 16.7 |
| 130° | 2.0 | 1.3 | 7.3 | 13.4 | 14.7 |
| 132.5° | 2.0 | 1.3 | 5.3 | 11.4 | 12.7 |
| 135° | 1.3 | 1.3 | 4.0 | 9.4 | 11.4 |
| 137.5° | 1.3 | 0.7 | 2.7 | 7.3 | 9.4 |
| 140° | 1.3 | 0.7 | 1.3 | 6.0 | 7.3 |
| 142.5° | 0.7 | 0.7 | 0.7 | 4.0 | 5.3 |
| 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)