

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: FAIL-SAFE

Report Number: P838127

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-1LO-50-120-EDD**

Issue Date: 5/21/2024

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08  
Report Number: P838127  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-24-4-INS-ASY2R-LD4-1LO-50-120-EDD  
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

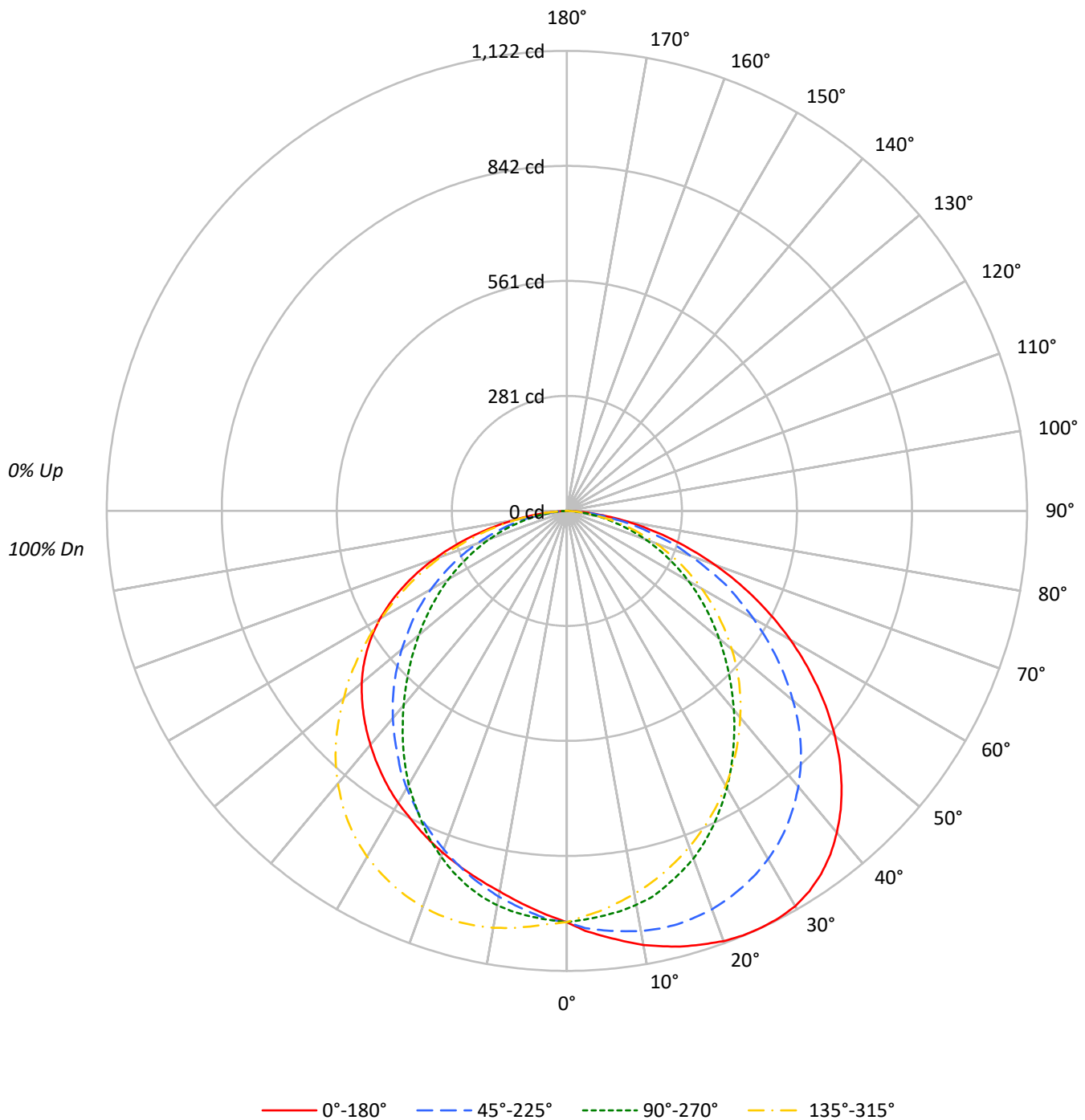
Lumens per Lamp: N/A  
Luminaire Lumens: 2942.4 lumens  
Efficiency: N/A  
Efficacy: 125.7 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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

TEST NUMBER: P838127

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-1LO-50-120-EDD

### 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  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 94  | 91  | 89  | 90  | 88  | 86  | 84  |    |    |
| 2   | 99  | 91  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |
| 3   | 90  | 79  | 71  | 65  | 88  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 59  |    |    |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  | 64  | 58  | 53  | 62  | 56  | 52  | 50  |    |    |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 45  | 43  |    |    |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 46  | 40  | 35  | 33  |    |    |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 31  | 29  |    |    |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26  |    |    |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 26  | 24  |    |    |

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

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 1349 | 1349 | 1349 | 1349 |
| 5°  | 1406 | 1340 | 1314 | 1342 |
| 10° | 1469 | 1333 | 1288 | 1335 |
| 15° | 1532 | 1316 | 1275 | 1316 |
| 20° | 1599 | 1292 | 1269 | 1285 |
| 25° | 1665 | 1256 | 1269 | 1243 |
| 30° | 1729 | 1212 | 1278 | 1199 |
| 35° | 1775 | 1162 | 1291 | 1144 |
| 40° | 1799 | 1112 | 1309 | 1087 |
| 45° | 1802 | 1062 | 1334 | 1035 |
| 50° | 1785 | 1013 | 1367 | 986  |
| 55° | 1748 | 968  | 1397 | 941  |
| 60° | 1693 | 921  | 1416 | 897  |
| 65° | 1618 | 867  | 1408 | 847  |
| 70° | 1511 | 803  | 1358 | 789  |
| 75° | 1359 | 716  | 1247 | 713  |
| 80° | 1153 | 600  | 1048 | 609  |
| 85° | 801  | 397  | 664  | 408  |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838127

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-1LO-50-120-EDD

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 95.2   | 3.2       |
| 10°-20°   | 275.7  | 9.4       |
| 20°-30°   | 422.6  | 14.4      |
| 30°-40°   | 513.8  | 17.5      |
| 40°-50°   | 534.1  | 18.2      |
| 50°-60°   | 482.5  | 16.4      |
| 60°-70°   | 366.8  | 12.5      |
| 70°-80°   | 204.5  | 7.0       |
| 80°-90°   | 47.1   | 1.6       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 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°    | 793.5  | 27.0      |
| 0°-40°    | 1307.3 | 44.4      |
| 0°-60°    | 2324.0 | 79.0      |
| 0°-90°    | 2942.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2942.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 90°  | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 1003 | 1003 | 1003 | 1003 | 1003 |      |
| 5°  | 1041 | 992  | 973  | 994  | 1041 | 100  |
| 15° | 1100 | 945  | 915  | 945  | 1100 | 312  |
| 25° | 1122 | 846  | 855  | 837  | 1122 | 518  |
| 35° | 1081 | 708  | 786  | 696  | 1081 | 675  |
| 45° | 947  | 558  | 701  | 544  | 947  | 729  |
| 55° | 745  | 413  | 596  | 401  | 745  | 665  |
| 65° | 508  | 272  | 442  | 266  | 508  | 502  |
| 75° | 262  | 138  | 240  | 137  | 262  | 278  |
| 85° | 52   | 26   | 43   | 26   | 52   | 65   |
| 90° | 0    | 0    | 0    | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 |
| 2.5°  | 1025.1 | 1010.2 | 1010.4 | 1023.5 | 1013.4 | 1018.3 | 1004.3 | 1009.7 | 1008.0 | 1009.2 | 997.8  |
| 5°    | 1041.3 | 1025.1 | 1024.9 | 1036.1 | 1024.9 | 1027.0 | 1009.2 | 1012.7 | 1007.6 | 1004.3 | 991.9  |
| 7.5°  | 1058.3 | 1042.2 | 1040.6 | 1050.4 | 1035.7 | 1034.0 | 1014.4 | 1014.4 | 1005.0 | 996.8  | 985.1  |
| 10°   | 1075.2 | 1058.6 | 1056.5 | 1064.0 | 1045.7 | 1040.3 | 1016.5 | 1012.7 | 1000.3 | 988.2  | 975.5  |
| 12.5° | 1087.8 | 1071.0 | 1069.3 | 1074.0 | 1053.4 | 1043.6 | 1016.5 | 1009.2 | 991.0  | 973.9  | 964.1  |
| 15°   | 1099.8 | 1082.4 | 1078.0 | 1080.3 | 1056.7 | 1043.6 | 1013.2 | 1002.0 | 978.6  | 956.1  | 944.6  |
| 17.5° | 1108.2 | 1091.6 | 1087.1 | 1086.9 | 1058.3 | 1039.6 | 1006.2 | 990.7  | 962.7  | 935.5  | 924.1  |
| 20°   | 1116.6 | 1100.0 | 1094.4 | 1090.2 | 1057.9 | 1034.2 | 995.9  | 975.1  | 942.3  | 911.9  | 902.3  |
| 22.5° | 1120.8 | 1103.7 | 1097.6 | 1091.3 | 1054.8 | 1024.4 | 983.2  | 956.8  | 919.4  | 883.1  | 875.2  |
| 25°   | 1121.5 | 1104.0 | 1097.4 | 1088.3 | 1048.8 | 1012.7 | 966.9  | 934.8  | 892.9  | 852.7  | 845.9  |
| 27.5° | 1119.6 | 1100.5 | 1093.9 | 1082.9 | 1039.6 | 998.5  | 947.5  | 909.8  | 864.9  | 820.4  | 813.2  |
| 30°   | 1113.1 | 1093.7 | 1087.4 | 1073.1 | 1026.8 | 980.9  | 926.2  | 882.0  | 833.8  | 786.5  | 780.2  |
| 32.5° | 1100.0 | 1081.0 | 1075.9 | 1061.6 | 1012.7 | 960.6  | 901.4  | 852.0  | 799.4  | 754.2  | 744.9  |
| 35°   | 1080.8 | 1061.9 | 1058.6 | 1043.6 | 993.1  | 936.2  | 874.2  | 819.3  | 762.9  | 716.8  | 707.7  |
| 37.5° | 1055.8 | 1039.9 | 1035.0 | 1020.2 | 969.9  | 908.6  | 843.1  | 783.7  | 725.7  | 676.1  | 670.5  |
| 40°   | 1024.2 | 1009.2 | 1005.5 | 992.4  | 943.0  | 878.0  | 809.4  | 747.0  | 687.3  | 641.2  | 633.3  |
| 42.5° | 988.2  | 974.1  | 972.0  | 958.5  | 909.8  | 844.1  | 772.9  | 708.8  | 647.3  | 602.9  | 594.9  |
| 45°   | 947.2  | 933.7  | 933.2  | 920.3  | 873.5  | 806.4  | 734.6  | 670.2  | 608.2  | 562.2  | 557.9  |
| 47.5° | 902.1  | 889.9  | 889.9  | 878.0  | 833.1  | 765.0  | 695.0  | 630.0  | 568.9  | 528.2  | 520.8  |
| 50°   | 852.9  | 841.5  | 838.0  | 832.1  | 788.4  | 719.8  | 653.4  | 590.7  | 530.1  | 491.3  | 484.0  |
| 52.5° | 800.5  | 790.7  | 793.1  | 782.3  | 740.0  | 672.8  | 611.3  | 546.5  | 491.0  | 455.7  | 448.5  |
| 55°   | 745.3  | 731.3  | 733.4  | 729.4  | 689.4  | 624.4  | 564.0  | 510.0  | 452.7  | 419.5  | 412.7  |
| 57.5° | 688.0  | 669.8  | 677.3  | 674.9  | 635.6  | 574.8  | 520.8  | 468.6  | 414.5  | 383.9  | 377.3  |
| 60°   | 629.3  | 611.8  | 619.5  | 617.4  | 580.4  | 525.2  | 476.1  | 427.6  | 376.6  | 348.8  | 342.3  |
| 62.5° | 568.9  | 552.8  | 559.8  | 558.2  | 524.3  | 474.4  | 431.6  | 387.2  | 338.5  | 313.5  | 307.4  |
| 65°   | 508.1  | 492.7  | 499.0  | 497.8  | 466.5  | 428.6  | 386.0  | 345.3  | 300.1  | 278.4  | 272.3  |
| 67.5° | 445.9  | 431.6  | 437.5  | 437.5  | 408.7  | 372.4  | 340.1  | 303.0  | 262.5  | 243.8  | 238.2  |
| 70°   | 384.1  | 370.8  | 375.9  | 375.5  | 351.1  | 321.7  | 293.8  | 260.6  | 224.3  | 208.9  | 204.2  |
| 72.5° | 321.9  | 310.2  | 314.9  | 314.4  | 294.1  | 275.1  | 247.5  | 218.7  | 187.2  | 174.8  | 170.5  |
| 75°   | 261.5  | 250.5  | 255.0  | 254.5  | 237.9  | 220.1  | 201.7  | 177.8  | 150.7  | 142.0  | 137.8  |
| 77.5° | 204.0  | 192.8  | 196.5  | 196.5  | 184.3  | 171.5  | 156.7  | 138.3  | 119.1  | 109.7  | 106.7  |
| 80°   | 148.8  | 143.4  | 141.5  | 141.8  | 133.6  | 125.2  | 117.7  | 99.9   | 85.9   | 79.5   | 77.4   |
| 82.5° | 97.8   | 93.3   | 91.5   | 91.9   | 87.3   | 82.1   | 77.4   | 65.0   | 55.7   | 51.9   | 50.8   |
| 85°   | 51.9   | 48.7   | 47.0   | 48.2   | 47.3   | 44.4   | 42.1   | 33.7   | 27.8   | 26.4   | 25.7   |
| 87.5° | 16.4   | 14.3   | 13.1   | 17.3   | 14.7   | 13.1   | 12.6   | 10.1   | 7.7    | 7.7    | 7.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CANDELA DISTRIBUTION (continued):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   | 185°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 |
| 2.5°  | 1001.5 | 1001.5 | 992.4  | 990.3  | 989.3  | 990.5  | 981.4  | 979.7  | 992.8  | 988.4  | 978.3  |
| 5°    | 993.5  | 993.1  | 980.2  | 977.9  | 977.9  | 976.5  | 966.2  | 963.8  | 976.9  | 973.2  | 962.2  |
| 7.5°  | 983.7  | 982.3  | 967.1  | 965.5  | 963.1  | 962.2  | 950.7  | 949.1  | 960.3  | 958.0  | 947.7  |
| 10°   | 971.8  | 970.4  | 952.4  | 951.2  | 948.6  | 946.8  | 936.0  | 934.8  | 946.3  | 942.5  | 934.4  |
| 12.5° | 956.1  | 953.5  | 935.1  | 933.9  | 931.8  | 931.1  | 920.6  | 920.1  | 932.7  | 929.0  | 920.3  |
| 15°   | 935.5  | 933.4  | 912.8  | 913.3  | 913.5  | 913.5  | 905.1  | 904.6  | 917.0  | 915.4  | 906.0  |
| 17.5° | 912.8  | 910.0  | 890.4  | 891.8  | 893.4  | 895.3  | 888.7  | 889.9  | 903.0  | 900.9  | 892.5  |
| 20°   | 887.1  | 884.3  | 865.1  | 869.1  | 872.6  | 876.3  | 872.1  | 875.4  | 887.6  | 886.6  | 880.3  |
| 22.5° | 858.3  | 855.5  | 837.7  | 843.8  | 849.7  | 856.7  | 854.8  | 858.6  | 871.4  | 871.2  | 865.6  |
| 25°   | 823.2  | 823.9  | 808.3  | 815.7  | 825.6  | 835.4  | 836.1  | 842.2  | 856.5  | 855.1  | 849.9  |
| 27.5° | 790.5  | 791.4  | 774.8  | 787.4  | 800.5  | 813.2  | 816.2  | 824.6  | 839.1  | 838.0  | 833.5  |
| 30°   | 756.1  | 757.3  | 741.1  | 758.4  | 774.3  | 789.8  | 796.3  | 807.8  | 822.5  | 822.5  | 817.9  |
| 32.5° | 720.3  | 722.4  | 705.6  | 728.7  | 747.2  | 765.2  | 776.7  | 788.6  | 805.5  | 805.0  | 801.0  |
| 35°   | 683.6  | 685.9  | 670.5  | 699.9  | 718.4  | 740.4  | 754.7  | 770.6  | 785.6  | 785.8  | 782.8  |
| 37.5° | 646.1  | 648.9  | 634.9  | 667.2  | 688.3  | 714.2  | 732.5  | 748.4  | 765.0  | 765.9  | 763.1  |
| 40°   | 608.9  | 612.0  | 599.8  | 630.9  | 657.6  | 686.6  | 707.7  | 726.4  | 744.6  | 745.1  | 743.2  |
| 42.5° | 571.7  | 575.0  | 565.9  | 596.3  | 626.5  | 657.6  | 682.4  | 703.7  | 722.4  | 723.6  | 721.5  |
| 45°   | 535.5  | 538.3  | 531.7  | 565.0  | 594.0  | 627.9  | 656.4  | 680.5  | 699.5  | 701.1  | 700.4  |
| 47.5° | 499.5  | 502.0  | 496.2  | 526.6  | 560.1  | 596.1  | 629.1  | 655.7  | 675.9  | 677.7  | 677.3  |
| 50°   | 464.1  | 466.2  | 459.9  | 491.7  | 525.0  | 563.3  | 597.7  | 628.6  | 651.1  | 652.9  | 652.7  |
| 52.5° | 429.0  | 431.2  | 425.8  | 459.2  | 489.4  | 529.9  | 567.3  | 600.8  | 623.0  | 625.8  | 626.3  |
| 55°   | 395.1  | 396.1  | 391.8  | 423.9  | 453.1  | 495.5  | 538.5  | 571.0  | 593.3  | 595.6  | 597.0  |
| 57.5° | 361.2  | 361.4  | 357.9  | 388.6  | 416.6  | 459.9  | 505.1  | 539.2  | 560.3  | 562.6  | 564.7  |
| 60°   | 327.5  | 327.3  | 323.3  | 353.0  | 379.9  | 422.7  | 469.8  | 503.7  | 524.0  | 526.1  | 528.9  |
| 62.5° | 294.1  | 293.4  | 289.9  | 317.2  | 342.5  | 384.8  | 432.1  | 464.8  | 484.3  | 485.7  | 489.4  |
| 65°   | 260.8  | 260.1  | 256.9  | 282.1  | 305.1  | 345.5  | 391.8  | 423.0  | 440.5  | 442.4  | 441.7  |
| 67.5° | 228.1  | 226.7  | 224.1  | 246.8  | 267.6  | 305.1  | 349.5  | 379.2  | 393.7  | 395.4  | 399.8  |
| 70°   | 195.3  | 193.7  | 187.9  | 211.9  | 230.2  | 263.7  | 305.1  | 331.5  | 343.7  | 345.3  | 344.6  |
| 72.5° | 163.1  | 161.4  | 155.1  | 177.3  | 192.8  | 222.0  | 259.0  | 281.0  | 291.5  | 292.9  | 292.9  |
| 75°   | 131.7  | 130.8  | 126.8  | 143.6  | 156.5  | 180.4  | 211.7  | 230.0  | 238.2  | 239.8  | 239.3  |
| 77.5° | 101.5  | 100.8  | 96.9   | 111.4  | 121.4  | 139.2  | 164.5  | 178.7  | 184.8  | 186.7  | 190.7  |
| 80°   | 72.8   | 72.5   | 66.2   | 80.5   | 84.9   | 99.9   | 118.4  | 129.4  | 132.6  | 135.2  | 138.0  |
| 82.5° | 46.6   | 46.8   | 40.5   | 52.6   | 54.5   | 64.1   | 75.6   | 82.3   | 84.7   | 86.8   | 88.9   |
| 85°   | 22.7   | 23.6   | 20.1   | 27.8   | 28.1   | 33.0   | 37.9   | 40.5   | 41.4   | 43.0   | 44.9   |
| 87.5° | 5.8    | 6.8    | 3.7    | 8.0    | 7.0    | 9.1    | 10.5   | 11.2   | 11.0   | 12.2   | 12.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838127

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-1LO-50-120-EDD

**CANDELA DISTRIBUTION (continued):**

|       | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   | 285°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 |
| 2.5°  | 981.6  | 989.1  | 985.4  | 997.5  | 1002.2 | 994.7  | 1007.8 | 1008.0 | 998.7  | 1009.7 | 1015.8 |
| 5°    | 966.4  | 974.1  | 971.8  | 984.4  | 990.3  | 983.7  | 999.6  | 1002.7 | 993.5  | 1005.9 | 1015.8 |
| 7.5°  | 951.0  | 960.1  | 957.0  | 969.9  | 976.9  | 971.8  | 988.9  | 993.8  | 986.8  | 1000.3 | 1013.4 |
| 10°   | 937.6  | 945.4  | 942.1  | 955.6  | 961.7  | 957.5  | 974.4  | 983.5  | 976.9  | 993.5  | 1009.2 |
| 12.5° | 924.5  | 930.8  | 927.1  | 938.3  | 944.2  | 938.8  | 959.4  | 967.8  | 963.1  | 980.4  | 1000.6 |
| 15°   | 907.7  | 914.7  | 909.6  | 919.6  | 924.1  | 919.4  | 936.2  | 950.7  | 944.9  | 963.8  | 986.1  |
| 17.5° | 894.8  | 898.8  | 891.8  | 899.7  | 902.3  | 896.0  | 913.1  | 927.3  | 923.1  | 943.7  | 969.4  |
| 20°   | 880.6  | 883.8  | 874.0  | 878.4  | 878.2  | 870.3  | 885.9  | 900.0  | 897.2  | 919.9  | 949.1  |
| 22.5° | 864.6  | 866.3  | 854.8  | 855.8  | 855.3  | 842.2  | 856.2  | 870.5  | 869.3  | 892.2  | 925.0  |
| 25°   | 847.8  | 848.0  | 833.3  | 832.8  | 827.7  | 812.2  | 824.6  | 840.8  | 837.3  | 862.1  | 896.5  |
| 27.5° | 831.2  | 828.8  | 811.1  | 806.9  | 798.7  | 780.2  | 791.2  | 805.7  | 803.6  | 827.9  | 866.0  |
| 30°   | 813.4  | 810.4  | 788.6  | 780.9  | 769.0  | 747.7  | 756.8  | 770.4  | 771.5  | 792.8  | 832.8  |
| 32.5° | 796.6  | 788.8  | 764.7  | 753.5  | 738.5  | 713.8  | 718.7  | 732.5  | 734.3  | 755.9  | 797.0  |
| 35°   | 774.8  | 769.7  | 740.0  | 720.8  | 706.0  | 678.9  | 684.0  | 693.6  | 696.4  | 717.5  | 759.4  |
| 37.5° | 754.2  | 746.0  | 714.5  | 691.1  | 672.1  | 643.6  | 645.0  | 654.8  | 657.6  | 678.9  | 720.3  |
| 40°   | 732.9  | 721.2  | 687.3  | 659.9  | 638.2  | 608.2  | 606.6  | 616.9  | 619.0  | 639.8  | 677.3  |
| 42.5° | 710.2  | 696.2  | 658.1  | 628.1  | 603.1  | 572.7  | 569.4  | 578.3  | 580.6  | 601.0  | 637.7  |
| 45°   | 687.3  | 670.5  | 628.1  | 595.4  | 568.0  | 536.9  | 533.6  | 540.4  | 543.9  | 563.1  | 598.4  |
| 47.5° | 663.0  | 643.3  | 597.2  | 560.8  | 532.4  | 501.3  | 497.4  | 504.1  | 506.9  | 525.9  | 559.4  |
| 50°   | 637.5  | 613.6  | 565.4  | 525.2  | 497.1  | 466.5  | 460.6  | 468.6  | 471.2  | 488.9  | 521.7  |
| 52.5° | 609.4  | 583.0  | 531.5  | 489.4  | 461.3  | 432.1  | 425.1  | 432.8  | 435.8  | 453.1  | 483.3  |
| 55°   | 579.7  | 551.2  | 497.4  | 456.4  | 426.0  | 397.5  | 391.6  | 394.7  | 401.2  | 417.6  | 445.7  |
| 57.5° | 546.2  | 517.9  | 461.3  | 419.7  | 390.4  | 363.1  | 358.2  | 361.0  | 367.1  | 383.0  | 408.2  |
| 60°   | 510.7  | 480.7  | 424.6  | 383.0  | 354.7  | 328.7  | 324.2  | 326.8  | 333.4  | 347.9  | 371.3  |
| 62.5° | 475.6  | 441.9  | 386.7  | 345.3  | 319.6  | 295.5  | 294.3  | 293.4  | 299.4  | 313.5  | 334.1  |
| 65°   | 433.0  | 400.7  | 347.2  | 307.9  | 284.5  | 262.7  | 258.0  | 260.1  | 266.0  | 278.9  | 300.4  |
| 67.5° | 387.4  | 358.2  | 306.7  | 270.4  | 249.6  | 230.2  | 226.2  | 227.2  | 233.2  | 244.5  | 263.2  |
| 70°   | 339.0  | 313.2  | 265.3  | 232.8  | 215.2  | 197.0  | 194.4  | 194.6  | 200.5  | 210.3  | 226.7  |
| 72.5° | 288.2  | 265.1  | 223.4  | 195.6  | 181.1  | 168.0  | 165.6  | 162.8  | 168.2  | 176.6  | 190.7  |
| 75°   | 236.5  | 216.2  | 181.8  | 159.1  | 147.6  | 136.6  | 134.5  | 131.7  | 137.1  | 144.3  | 155.3  |
| 77.5° | 184.3  | 168.0  | 141.3  | 123.8  | 114.9  | 106.7  | 104.8  | 101.8  | 107.1  | 112.5  | 121.2  |
| 80°   | 133.3  | 121.4  | 105.5  | 87.0   | 84.0   | 78.6   | 76.7   | 73.5   | 78.6   | 82.1   | 88.7   |
| 82.5° | 86.1   | 78.1   | 69.0   | 56.1   | 55.7   | 51.7   | 50.8   | 47.0   | 51.7   | 53.8   | 58.7   |
| 85°   | 43.5   | 39.8   | 37.4   | 28.5   | 29.5   | 26.9   | 26.7   | 22.7   | 26.4   | 27.4   | 30.2   |
| 87.5° | 12.4   | 13.1   | 11.7   | 7.0    | 8.9    | 8.4    | 8.4    | 6.1    | 8.4    | 8.4    | 9.6    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



Cooper Lighting Solutions Photometric Lab

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Peachtree City, GA 30269



TEST NUMBER: P838127

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-1LO-50-120-EDD

**CANDELA DISTRIBUTION (continued):**

|       | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 | 1002.9 |
| 2.5°  | 1003.8 | 1007.8 | 1008.7 | 1008.5 | 1011.1 | 1025.1 | 1020.4 | 1025.1 |
| 5°    | 1006.2 | 1015.1 | 1017.4 | 1020.7 | 1024.9 | 1040.8 | 1035.7 | 1041.3 |
| 7.5°  | 1007.6 | 1020.9 | 1026.1 | 1032.4 | 1039.2 | 1056.9 | 1052.7 | 1058.3 |
| 10°   | 1007.6 | 1024.9 | 1032.4 | 1042.9 | 1052.0 | 1072.6 | 1068.6 | 1075.2 |
| 12.5° | 1003.4 | 1025.6 | 1036.1 | 1050.9 | 1062.6 | 1084.8 | 1083.1 | 1087.8 |
| 15°   | 994.7  | 1022.1 | 1036.6 | 1055.5 | 1070.0 | 1094.8 | 1094.1 | 1099.8 |
| 17.5° | 983.0  | 1016.0 | 1033.5 | 1057.4 | 1075.7 | 1103.5 | 1105.1 | 1108.2 |
| 20°   | 968.3  | 1004.5 | 1027.5 | 1056.7 | 1079.6 | 1110.3 | 1112.4 | 1116.6 |
| 22.5° | 948.9  | 990.7  | 1018.3 | 1053.7 | 1080.1 | 1113.1 | 1116.8 | 1120.8 |
| 25°   | 925.9  | 974.1  | 1006.4 | 1047.8 | 1077.8 | 1112.9 | 1118.0 | 1121.5 |
| 27.5° | 899.7  | 952.6  | 991.2  | 1038.5 | 1071.2 | 1109.1 | 1115.4 | 1119.6 |
| 30°   | 869.3  | 929.7  | 973.9  | 1026.3 | 1062.3 | 1102.1 | 1108.9 | 1113.1 |
| 32.5° | 838.0  | 904.4  | 953.3  | 1010.6 | 1049.5 | 1090.9 | 1096.7 | 1100.0 |
| 35°   | 803.8  | 873.8  | 928.5  | 990.5  | 1032.8 | 1072.8 | 1077.3 | 1080.8 |
| 37.5° | 766.6  | 840.5  | 900.2  | 967.8  | 1009.5 | 1047.8 | 1051.8 | 1055.8 |
| 40°   | 728.3  | 805.7  | 868.4  | 940.0  | 981.6  | 1017.2 | 1021.4 | 1024.2 |
| 42.5° | 689.7  | 767.1  | 834.5  | 907.2  | 948.6  | 982.8  | 985.4  | 988.2  |
| 45°   | 650.6  | 727.1  | 796.3  | 871.0  | 911.9  | 943.9  | 944.9  | 947.2  |
| 47.5° | 610.8  | 685.7  | 754.5  | 829.6  | 870.0  | 899.3  | 900.2  | 902.1  |
| 50°   | 570.8  | 644.3  | 709.8  | 784.9  | 824.4  | 855.3  | 851.1  | 852.9  |
| 52.5° | 531.5  | 600.8  | 667.7  | 736.7  | 775.7  | 803.1  | 804.3  | 800.5  |
| 55°   | 492.9  | 558.2  | 619.7  | 686.1  | 723.3  | 744.6  | 743.9  | 745.3  |
| 57.5° | 453.8  | 515.1  | 571.5  | 632.3  | 668.6  | 688.7  | 692.9  | 688.0  |
| 60°   | 414.1  | 471.6  | 522.2  | 577.1  | 612.2  | 629.1  | 634.0  | 629.3  |
| 62.5° | 374.5  | 427.4  | 473.3  | 521.2  | 553.7  | 574.6  | 574.1  | 568.9  |
| 65°   | 335.0  | 383.0  | 423.9  | 464.6  | 492.9  | 513.7  | 512.8  | 508.1  |
| 67.5° | 298.5  | 338.0  | 374.8  | 407.8  | 432.3  | 446.6  | 451.5  | 445.9  |
| 70°   | 258.3  | 292.4  | 324.7  | 351.1  | 371.5  | 384.4  | 389.0  | 384.1  |
| 72.5° | 218.0  | 247.0  | 269.7  | 295.2  | 310.9  | 321.7  | 326.6  | 321.9  |
| 75°   | 178.3  | 202.1  | 220.6  | 240.5  | 251.5  | 260.6  | 266.2  | 261.5  |
| 77.5° | 139.7  | 158.1  | 172.9  | 187.4  | 200.0  | 202.1  | 207.0  | 204.0  |
| 80°   | 102.9  | 116.3  | 127.0  | 136.6  | 145.7  | 146.7  | 150.7  | 148.8  |
| 82.5° | 68.5   | 77.4   | 80.2   | 90.3   | 96.1   | 95.2   | 99.2   | 97.8   |
| 85°   | 36.3   | 41.6   | 46.6   | 49.6   | 52.9   | 49.8   | 53.3   | 51.9   |
| 87.5° | 12.2   | 12.9   | 11.2   | 15.9   | 17.5   | 15.0   | 17.1   | 16.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)