

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P148943

Luminaire Tested: **TLM-F02-LED-E1-RW-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P148943  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33677)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TLM-F02-LED-E1-RW-8030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE  
Light Source: (14) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4353.1 lumens  
Efficiency: N/A  
Efficacy: 79.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 3.07 / 1.6  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
CIE Type: Direct

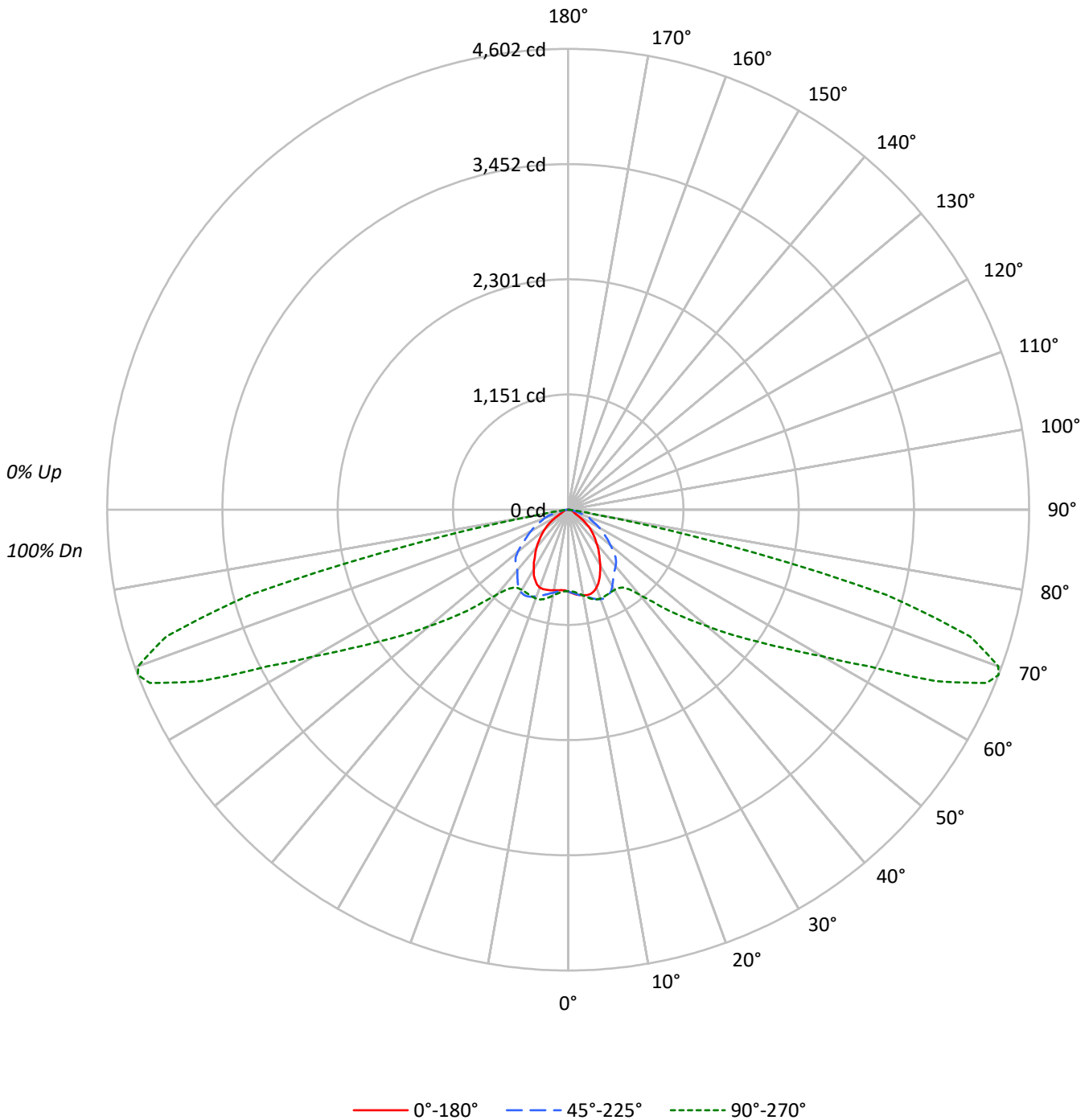
Input Watts (W): 55  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P148943

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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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 106 | 101 | 95  | 91  | 104 | 98  | 93  | 89  | 94  | 90  | 86  | 90  | 87  | 84  | 86  | 84  | 81  | 79  |
| 2   | 94  | 84  | 76  | 69  | 91  | 82  | 75  | 68  | 79  | 72  | 66  | 75  | 70  | 65  | 72  | 67  | 63  | 61  |
| 3   | 84  | 72  | 62  | 54  | 81  | 70  | 61  | 54  | 67  | 59  | 52  | 64  | 57  | 51  | 61  | 55  | 51  | 48  |
| 4   | 76  | 62  | 51  | 44  | 73  | 60  | 51  | 43  | 58  | 49  | 43  | 55  | 48  | 42  | 53  | 47  | 41  | 39  |
| 5   | 69  | 54  | 44  | 36  | 67  | 53  | 43  | 36  | 51  | 42  | 35  | 49  | 41  | 35  | 47  | 40  | 35  | 32  |
| 6   | 63  | 48  | 38  | 31  | 61  | 47  | 37  | 30  | 45  | 36  | 30  | 43  | 36  | 30  | 42  | 35  | 29  | 27  |
| 7   | 58  | 43  | 33  | 26  | 56  | 42  | 33  | 26  | 40  | 32  | 26  | 39  | 31  | 26  | 38  | 31  | 25  | 23  |
| 8   | 54  | 39  | 29  | 23  | 52  | 38  | 29  | 23  | 37  | 29  | 23  | 35  | 28  | 23  | 34  | 27  | 22  | 20  |
| 9   | 50  | 35  | 26  | 20  | 49  | 35  | 26  | 20  | 34  | 26  | 20  | 32  | 25  | 20  | 31  | 25  | 20  | 18  |
| 10  | 47  | 33  | 24  | 18  | 46  | 32  | 24  | 18  | 31  | 23  | 18  | 30  | 23  | 18  | 29  | 23  | 18  | 16  |

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

|     | 0°    | 90°    | 180°  |
|-----|-------|--------|-------|
| 0°  | 26603 | 26603  | 26603 |
| 5°  | 27785 | 27088  | 26387 |
| 10° | 28739 | 28832  | 27093 |
| 15° | 29396 | 31199  | 27950 |
| 20° | 28682 | 32747  | 28748 |
| 25° | 26762 | 33550  | 27968 |
| 30° | 24090 | 34832  | 25875 |
| 35° | 21399 | 37749  | 23139 |
| 40° | 18867 | 46974  | 20847 |
| 45° | 16500 | 65821  | 18212 |
| 50° | 13884 | 91761  | 15629 |
| 55° | 10009 | 130221 | 12283 |
| 60° | 5969  | 190684 | 7333  |
| 65° | 5379  | 312427 | 5379  |
| 70° | 5493  | 435710 | 5579  |
| 75° | 5848  | 414676 | 6150  |
| 80° | 5936  | 53403  | 6462  |
| 85° | 3817  | 13398  | 5389  |



TEST NUMBER: P148943

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 80.0   | 1.8       |
| 10°-20°   | 252.4  | 5.8       |
| 20°-30°   | 408.9  | 9.4       |
| 30°-40°   | 509.6  | 11.7      |
| 40°-50°   | 636.8  | 14.6      |
| 50°-60°   | 786.3  | 18.1      |
| 60°-70°   | 977.0  | 22.4      |
| 70°-80°   | 648.6  | 14.9      |
| 80°-90°   | 53.6   | 1.2       |
| 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°    | 741.3  | 17.0      |
| 0°-40°    | 1250.9 | 28.7      |
| 0°-60°    | 2674.0 | 61.4      |
| 0°-90°    | 4353.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4353.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90°  | 135° | 180° | Flux |
|-----|-----|-----|------|------|------|------|
| 0°  | 816 | 816 | 816  | 816  | 816  |      |
| 5°  | 849 | 844 | 827  | 814  | 806  | 82   |
| 15° | 870 | 915 | 924  | 878  | 828  | 244  |
| 25° | 744 | 947 | 932  | 956  | 777  | 340  |
| 35° | 537 | 792 | 948  | 881  | 581  | 337  |
| 45° | 358 | 666 | 1427 | 744  | 395  | 276  |
| 55° | 176 | 451 | 2290 | 529  | 216  | 157  |
| 65° | 70  | 262 | 4048 | 333  | 70   | 70   |
| 75° | 46  | 103 | 3290 | 134  | 49   | 49   |
| 85° | 10  | 20  | 36   | 26   | 14   | 13   |
| 90° | 0   | 0   | 0    | 0    | 0    |      |



TEST NUMBER: P148943

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°    | 70°    | 71°    | 72°    |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 0°    | 815.6 | 815.6 | 815.6 | 815.6 | 815.6 | 815.6 | 815.6 | 815.6  | 815.6  | 815.6  | 815.6  |
| 2.5°  | 834.2 | 837.0 | 834.2 | 834.2 | 831.9 | 829.6 | 828.2 | 824.9  | 823.1  | 822.1  | 822.1  |
| 5°    | 848.6 | 848.2 | 848.6 | 848.6 | 846.3 | 843.5 | 841.7 | 838.9  | 836.1  | 835.6  | 835.2  |
| 7.5°  | 859.3 | 858.8 | 860.2 | 863.0 | 861.6 | 859.3 | 859.3 | 856.5  | 854.7  | 854.7  | 853.7  |
| 10°   | 867.7 | 868.1 | 870.9 | 875.1 | 876.0 | 875.6 | 878.8 | 877.9  | 877.0  | 877.9  | 877.0  |
| 12.5° | 873.2 | 873.7 | 877.4 | 885.3 | 890.4 | 893.7 | 902.0 | 902.5  | 903.0  | 903.0  | 903.0  |
| 15°   | 870.5 | 870.5 | 877.9 | 892.8 | 905.3 | 915.0 | 925.7 | 927.6  | 925.7  | 927.1  | 926.2  |
| 17.5° | 854.2 | 855.1 | 867.2 | 890.0 | 915.5 | 936.9 | 948.5 | 945.2  | 942.0  | 942.0  | 940.6  |
| 20°   | 826.3 | 828.2 | 844.4 | 876.5 | 916.9 | 950.8 | 968.9 | 958.2  | 949.4  | 948.0  | 946.6  |
| 22.5° | 792.0 | 790.6 | 810.1 | 850.5 | 906.2 | 956.9 | 981.5 | 968.5  | 952.7  | 949.4  | 947.1  |
| 25°   | 743.6 | 744.6 | 765.0 | 810.1 | 879.3 | 947.1 | 985.2 | 978.7  | 960.1  | 955.9  | 950.8  |
| 27.5° | 690.7 | 693.0 | 714.9 | 760.8 | 837.5 | 922.9 | 981.0 | 988.9  | 974.5  | 969.9  | 965.2  |
| 30°   | 639.6 | 641.0 | 665.6 | 714.9 | 785.9 | 880.2 | 969.9 | 1000.0 | 992.6  | 988.9  | 984.7  |
| 32.5° | 585.3 | 589.9 | 611.3 | 667.0 | 745.0 | 833.3 | 952.7 | 1011.7 | 1014.4 | 1012.1 | 1009.8 |
| 35°   | 537.4 | 541.1 | 565.3 | 623.8 | 705.6 | 791.5 | 931.8 | 1024.2 | 1043.2 | 1042.8 | 1042.3 |
| 37.5° | 494.2 | 495.1 | 520.7 | 580.1 | 666.5 | 762.2 | 909.9 | 1044.6 | 1078.5 | 1083.2 | 1088.8 |
| 40°   | 443.1 | 447.8 | 474.2 | 538.3 | 628.0 | 737.1 | 891.4 | 1072.0 | 1127.8 | 1138.0 | 1145.9 |
| 42.5° | 402.2 | 402.2 | 425.9 | 489.6 | 582.5 | 708.3 | 884.9 | 1106.4 | 1186.3 | 1200.2 | 1214.2 |
| 45°   | 357.7 | 359.1 | 381.8 | 439.9 | 530.4 | 666.5 | 883.9 | 1144.5 | 1251.8 | 1271.8 | 1289.0 |
| 47.5° | 315.4 | 316.3 | 340.5 | 396.7 | 476.6 | 608.9 | 872.3 | 1186.8 | 1320.5 | 1349.3 | 1368.4 |
| 50°   | 273.6 | 272.2 | 295.4 | 352.5 | 428.7 | 549.5 | 835.2 | 1241.6 | 1406.0 | 1434.8 | 1456.6 |
| 52.5° | 222.0 | 225.7 | 250.8 | 305.2 | 381.8 | 498.9 | 759.4 | 1295.5 | 1494.3 | 1526.8 | 1556.5 |
| 55°   | 176.0 | 175.6 | 203.9 | 253.1 | 331.2 | 451.0 | 669.8 | 1333.6 | 1580.2 | 1617.8 | 1650.8 |
| 57.5° | 126.3 | 127.7 | 151.9 | 200.7 | 278.7 | 408.3 | 602.0 | 1327.0 | 1646.6 | 1691.2 | 1733.0 |
| 60°   | 91.5  | 94.3  | 112.4 | 148.2 | 222.5 | 359.1 | 554.6 | 1251.8 | 1692.1 | 1753.0 | 1803.6 |
| 62.5° | 77.1  | 79.4  | 95.2  | 114.7 | 171.9 | 307.5 | 508.6 | 1131.0 | 1751.1 | 1831.5 | 1904.9 |
| 65°   | 69.7  | 71.5  | 87.3  | 98.5  | 131.9 | 261.5 | 479.8 | 1045.6 | 1828.7 | 1950.9 | 2051.2 |
| 67.5° | 62.7  | 65.5  | 79.4  | 87.8  | 111.9 | 233.6 | 471.5 | 1032.6 | 1843.6 | 2005.2 | 2147.8 |
| 69°   | 59.5  | 62.2  | 74.8  | 82.2  | 105.4 | 224.8 | 455.7 | 985.6  | 1746.5 | 1920.2 | 2080.0 |
| 70°   | 57.6  | 59.9  | 71.1  | 79.0  | 103.6 | 216.5 | 433.4 | 916.9  | 1643.4 | 1818.5 | 1990.3 |
| 72.5° | 53.0  | 54.3  | 63.6  | 71.5  | 95.2  | 166.3 | 328.4 | 662.4  | 1226.7 | 1400.0 | 1568.6 |
| 75°   | 46.4  | 47.8  | 56.2  | 64.1  | 73.9  | 103.1 | 199.3 | 393.0  | 752.9  | 869.5  | 1038.6 |
| 77.5° | 39.9  | 41.3  | 48.3  | 60.4  | 58.5  | 67.4  | 121.7 | 235.0  | 394.8  | 452.9  | 561.1  |
| 80°   | 31.6  | 33.4  | 40.4  | 58.1  | 48.8  | 53.4  | 89.2  | 173.7  | 240.1  | 264.3  | 292.6  |
| 82.5° | 22.3  | 23.2  | 30.7  | 46.4  | 36.7  | 40.4  | 66.9  | 144.5  | 192.8  | 210.4  | 218.8  |
| 85°   | 10.2  | 10.7  | 18.1  | 27.4  | 21.8  | 19.5  | 35.8  | 92.4   | 127.7  | 132.8  | 140.3  |
| 87.5° | 0.0   | 0.0   | 1.9   | 1.9   | 3.7   | 2.3   | 4.2   | 11.6   | 19.5   | 19.5   | 23.7   |
| 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):**

|       | 73°    | 74°    | 75°    | 76°    | 77°    | 78°    | 79°    | 80°    | 81°    | 82°    | 83°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  |
| 2.5°  | 822.6  | 822.1  | 822.6  | 822.6  | 823.1  | 821.2  | 820.8  | 820.3  | 819.8  | 820.3  | 819.4  |
| 5°    | 835.2  | 834.7  | 834.7  | 835.2  | 834.7  | 833.3  | 832.8  | 832.8  | 831.4  | 831.0  | 831.0  |
| 7.5°  | 854.2  | 853.3  | 851.9  | 852.8  | 853.3  | 852.8  | 853.3  | 851.9  | 851.9  | 850.5  | 850.9  |
| 10°   | 877.9  | 877.0  | 876.5  | 877.4  | 877.9  | 877.4  | 877.9  | 876.0  | 875.6  | 875.1  | 874.2  |
| 12.5° | 903.9  | 902.0  | 903.4  | 903.4  | 903.9  | 905.8  | 903.4  | 904.4  | 902.5  | 902.5  | 902.0  |
| 15°   | 926.7  | 926.2  | 927.1  | 927.1  | 926.7  | 928.1  | 927.6  | 928.1  | 925.7  | 924.8  | 927.1  |
| 17.5° | 941.1  | 939.7  | 940.1  | 939.7  | 939.7  | 939.7  | 940.6  | 940.6  | 939.2  | 938.7  | 939.7  |
| 20°   | 944.8  | 942.5  | 942.0  | 941.5  | 940.6  | 940.6  | 941.1  | 940.1  | 939.2  | 938.3  | 939.2  |
| 22.5° | 943.8  | 941.1  | 938.3  | 936.9  | 935.5  | 933.6  | 933.2  | 932.2  | 930.8  | 930.8  | 931.3  |
| 25°   | 947.1  | 942.0  | 937.8  | 935.0  | 931.3  | 929.0  | 927.1  | 924.8  | 922.5  | 921.1  | 921.5  |
| 27.5° | 958.2  | 952.7  | 947.1  | 941.5  | 935.9  | 931.3  | 927.6  | 923.4  | 919.7  | 916.9  | 915.5  |
| 30°   | 979.1  | 971.7  | 965.2  | 958.7  | 951.7  | 945.2  | 939.2  | 932.7  | 925.7  | 921.5  | 917.8  |
| 32.5° | 1003.3 | 998.2  | 994.0  | 986.6  | 979.1  | 971.2  | 963.8  | 958.2  | 948.0  | 940.1  | 933.6  |
| 35°   | 1040.0 | 1038.1 | 1035.8 | 1030.2 | 1021.9 | 1017.7 | 1011.7 | 1002.8 | 990.8  | 983.8  | 974.0  |
| 37.5° | 1090.6 | 1091.1 | 1089.2 | 1086.9 | 1087.8 | 1079.9 | 1076.2 | 1075.3 | 1063.2 | 1058.6 | 1044.2 |
| 40°   | 1152.9 | 1159.8 | 1165.9 | 1165.9 | 1170.5 | 1171.0 | 1170.1 | 1177.9 | 1169.1 | 1171.0 | 1155.7 |
| 42.5° | 1222.1 | 1238.8 | 1248.1 | 1255.1 | 1270.4 | 1277.3 | 1289.0 | 1306.1 | 1307.1 | 1315.9 | 1316.8 |
| 45°   | 1303.8 | 1322.4 | 1340.1 | 1358.2 | 1378.6 | 1402.8 | 1426.9 | 1444.6 | 1472.4 | 1478.5 | 1498.4 |
| 47.5° | 1388.8 | 1415.8 | 1436.2 | 1459.4 | 1494.3 | 1525.4 | 1561.2 | 1597.4 | 1629.4 | 1652.2 | 1665.2 |
| 50°   | 1482.7 | 1510.1 | 1539.8 | 1565.8 | 1603.0 | 1646.6 | 1696.3 | 1746.0 | 1787.4 | 1827.8 | 1860.3 |
| 52.5° | 1586.7 | 1616.9 | 1644.8 | 1678.7 | 1716.3 | 1768.3 | 1822.7 | 1890.9 | 1946.2 | 2001.5 | 2041.4 |
| 55°   | 1686.6 | 1720.5 | 1746.0 | 1789.2 | 1828.2 | 1881.7 | 1949.0 | 2029.8 | 2106.5 | 2173.4 | 2227.7 |
| 57.5° | 1773.4 | 1806.9 | 1842.6 | 1879.8 | 1927.2 | 1980.6 | 2063.3 | 2155.2 | 2242.6 | 2330.3 | 2410.7 |
| 60°   | 1854.7 | 1899.8 | 1938.8 | 1988.0 | 2035.4 | 2097.2 | 2195.6 | 2309.4 | 2428.8 | 2538.0 | 2618.3 |
| 62.5° | 1977.3 | 2034.9 | 2080.9 | 2141.8 | 2207.7 | 2280.6 | 2389.3 | 2514.8 | 2670.4 | 2811.1 | 2936.0 |
| 65°   | 2148.7 | 2237.0 | 2311.3 | 2386.1 | 2466.4 | 2566.8 | 2684.3 | 2843.6 | 3015.5 | 3223.6 | 3388.5 |
| 67.5° | 2270.9 | 2381.4 | 2477.6 | 2571.4 | 2663.9 | 2774.9 | 2920.3 | 3107.0 | 3329.5 | 3548.2 | 3757.7 |
| 69°   | 2221.7 | 2338.7 | 2445.5 | 2538.9 | 2636.4 | 2747.5 | 2889.1 | 3094.0 | 3320.6 | 3561.2 | 3768.9 |
| 70°   | 2118.1 | 2244.4 | 2358.7 | 2447.9 | 2547.7 | 2657.8 | 2814.3 | 3009.9 | 3241.2 | 3490.2 | 3693.6 |
| 72.5° | 1703.3 | 1836.6 | 1949.5 | 2048.4 | 2152.9 | 2282.0 | 2421.4 | 2609.0 | 2865.4 | 3109.3 | 3290.4 |
| 75°   | 1173.3 | 1297.8 | 1425.5 | 1499.4 | 1619.2 | 1711.2 | 1843.6 | 2035.9 | 2250.0 | 2429.3 | 2597.0 |
| 77.5° | 663.8  | 730.6  | 827.3  | 857.4  | 943.4  | 1004.7 | 1074.8 | 1193.3 | 1304.8 | 1408.8 | 1439.0 |
| 80°   | 301.9  | 281.9  | 291.7  | 276.8  | 293.1  | 282.9  | 271.3  | 277.8  | 276.4  | 297.3  | 277.8  |
| 82.5° | 217.4  | 187.7  | 156.1  | 134.7  | 118.4  | 100.3  | 85.5   | 76.6   | 75.7   | 79.4   | 78.0   |
| 85°   | 138.9  | 126.8  | 99.4   | 79.9   | 61.3   | 47.4   | 39.5   | 35.8   | 35.8   | 38.1   | 37.6   |
| 87.5° | 24.2   | 20.9   | 13.0   | 11.1   | 9.8    | 6.5    | 4.2    | 4.2    | 3.7    | 4.6    | 6.0    |
| 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):**

|       | 84°    | 85°    | 86°    | 87°    | 88°    | 89°    | 90°    | 91°    | 92°    | 93°    | 94°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  |
| 2.5°  | 819.4  | 818.9  | 818.0  | 817.5  | 817.5  | 816.6  | 816.1  | 817.0  | 817.5  | 818.0  | 816.6  |
| 5°    | 831.0  | 829.6  | 829.1  | 829.6  | 827.3  | 827.7  | 827.3  | 827.7  | 827.7  | 827.7  | 826.8  |
| 7.5°  | 849.6  | 848.2  | 849.1  | 848.2  | 846.8  | 846.3  | 846.3  | 844.9  | 843.1  | 842.6  | 843.1  |
| 10°   | 875.1  | 873.2  | 873.7  | 874.2  | 872.8  | 871.8  | 870.5  | 868.6  | 868.6  | 868.1  | 867.2  |
| 12.5° | 902.5  | 901.6  | 901.6  | 902.0  | 901.6  | 899.7  | 897.9  | 896.9  | 896.5  | 896.5  | 896.5  |
| 15°   | 926.2  | 925.7  | 926.2  | 925.7  | 925.7  | 924.8  | 923.9  | 922.5  | 922.0  | 922.5  | 922.9  |
| 17.5° | 939.7  | 938.3  | 939.7  | 940.1  | 939.7  | 939.7  | 939.7  | 938.7  | 938.3  | 938.3  | 938.7  |
| 20°   | 940.6  | 939.7  | 940.6  | 942.0  | 942.0  | 942.5  | 943.4  | 943.8  | 943.4  | 944.3  | 944.8  |
| 22.5° | 931.3  | 931.3  | 932.7  | 934.1  | 936.4  | 937.3  | 939.2  | 940.1  | 941.1  | 942.5  | 943.4  |
| 25°   | 922.0  | 921.5  | 922.9  | 925.7  | 927.6  | 929.9  | 932.2  | 934.1  | 935.9  | 937.8  | 939.7  |
| 27.5° | 915.5  | 915.0  | 916.0  | 918.3  | 920.6  | 923.4  | 927.1  | 929.9  | 932.2  | 934.6  | 935.9  |
| 30°   | 916.0  | 914.1  | 913.7  | 915.5  | 917.8  | 921.1  | 924.8  | 928.1  | 931.3  | 933.2  | 934.6  |
| 32.5° | 929.4  | 924.8  | 922.9  | 922.5  | 923.4  | 925.7  | 928.5  | 931.8  | 934.1  | 935.9  | 936.4  |
| 35°   | 964.3  | 955.5  | 953.6  | 947.6  | 948.5  | 948.0  | 948.0  | 949.9  | 951.7  | 951.7  | 948.5  |
| 37.5° | 1034.9 | 1022.3 | 1013.5 | 1007.5 | 1001.4 | 1001.0 | 1000.0 | 999.1  | 994.5  | 991.7  | 991.2  |
| 40°   | 1145.0 | 1139.9 | 1123.1 | 1118.5 | 1108.3 | 1101.3 | 1103.2 | 1099.4 | 1088.3 | 1084.1 | 1082.3 |
| 42.5° | 1305.7 | 1308.5 | 1299.2 | 1277.3 | 1268.5 | 1255.1 | 1243.9 | 1242.0 | 1231.8 | 1223.5 | 1217.0 |
| 45°   | 1494.3 | 1499.4 | 1492.4 | 1476.6 | 1460.8 | 1440.4 | 1426.9 | 1400.9 | 1390.7 | 1377.7 | 1368.9 |
| 47.5° | 1688.0 | 1701.9 | 1690.7 | 1676.8 | 1668.0 | 1635.9 | 1608.1 | 1577.9 | 1562.5 | 1544.0 | 1535.6 |
| 50°   | 1880.3 | 1904.9 | 1898.4 | 1885.4 | 1875.6 | 1835.2 | 1808.3 | 1766.5 | 1757.6 | 1739.1 | 1728.8 |
| 52.5° | 2072.6 | 2096.7 | 2111.1 | 2099.0 | 2092.1 | 2059.6 | 2041.0 | 2007.5 | 1982.4 | 1970.8 | 1970.4 |
| 55°   | 2266.7 | 2305.7 | 2328.5 | 2324.3 | 2312.7 | 2308.5 | 2289.9 | 2286.7 | 2267.2 | 2254.6 | 2237.9 |
| 57.5° | 2456.7 | 2498.0 | 2537.5 | 2560.7 | 2570.5 | 2567.2 | 2576.1 | 2575.1 | 2577.9 | 2576.5 | 2549.1 |
| 60°   | 2698.2 | 2763.7 | 2821.3 | 2858.0 | 2892.8 | 2917.0 | 2923.0 | 2958.8 | 2948.6 | 2970.9 | 2928.1 |
| 62.5° | 3039.2 | 3124.2 | 3211.5 | 3250.0 | 3292.8 | 3371.3 | 3389.9 | 3432.1 | 3438.6 | 3444.2 | 3421.4 |
| 65°   | 3514.3 | 3625.8 | 3757.7 | 3816.7 | 3883.6 | 3984.4 | 4048.0 | 4093.1 | 4091.7 | 4061.0 | 4031.8 |
| 67.5° | 3919.8 | 4051.7 | 4173.0 | 4275.6 | 4375.5 | 4454.0 | 4520.9 | 4581.7 | 4585.0 | 4565.9 | 4515.8 |
| 69°   | 3954.7 | 4092.6 | 4224.5 | 4348.1 | 4447.0 | 4534.4 | 4602.2 | 4649.5 | 4659.8 | 4643.0 | 4596.6 |
| 70°   | 3890.1 | 4029.5 | 4173.0 | 4291.4 | 4403.4 | 4495.8 | 4568.7 | 4614.2 | 4628.2 | 4611.0 | 4567.3 |
| 72.5° | 3493.0 | 3628.1 | 3735.4 | 3874.8 | 4034.1 | 4092.2 | 4204.6 | 4241.7 | 4276.1 | 4253.3 | 4227.3 |
| 75°   | 2736.3 | 2863.6 | 2974.6 | 3047.1 | 3120.0 | 3263.5 | 3290.4 | 3360.1 | 3383.8 | 3361.5 | 3390.3 |
| 77.5° | 1425.5 | 1511.5 | 1548.6 | 1490.5 | 1499.4 | 1612.7 | 1548.6 | 1623.9 | 1667.1 | 1679.6 | 1697.7 |
| 80°   | 272.7  | 286.6  | 297.3  | 293.6  | 297.3  | 305.6  | 284.3  | 272.7  | 288.0  | 284.7  | 284.7  |
| 82.5° | 80.4   | 79.0   | 79.0   | 83.1   | 82.7   | 84.5   | 84.5   | 81.3   | 83.6   | 83.6   | 84.1   |
| 85°   | 36.7   | 34.8   | 34.4   | 34.8   | 34.4   | 34.4   | 35.8   | 35.8   | 38.6   | 36.2   | 36.7   |
| 87.5° | 4.6    | 4.2    | 4.6    | 4.6    | 3.7    | 3.7    | 4.2    | 4.6    | 4.6    | 4.2    | 4.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |





TEST NUMBER: P148943

CATALOG NUMBER: TLM-F02-LED-E1-RW-8030

**CANDELA DISTRIBUTION (continued):**

|       | 95°    | 96°    | 97°    | 98°    | 99°    | 100°   | 105°   | 115°   | 125°  | 135°  | 145°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 0°    | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6  | 815.6 | 815.6 | 815.6 |
| 2.5°  | 816.1  | 815.6  | 815.6  | 815.6  | 815.2  | 814.7  | 814.3  | 812.9  | 811.5 | 811.0 | 808.7 |
| 5°    | 824.9  | 825.4  | 824.5  | 823.5  | 823.5  | 823.5  | 822.1  | 818.4  | 815.6 | 814.3 | 811.0 |
| 7.5°  | 843.5  | 842.6  | 841.2  | 840.7  | 839.8  | 840.3  | 837.5  | 832.8  | 827.7 | 824.5 | 819.4 |
| 10°   | 868.1  | 867.2  | 866.3  | 865.3  | 864.0  | 864.0  | 860.7  | 853.7  | 845.8 | 840.3 | 831.0 |
| 12.5° | 896.9  | 896.0  | 895.1  | 894.6  | 892.3  | 891.8  | 887.2  | 878.8  | 868.6 | 857.9 | 844.4 |
| 15°   | 923.4  | 922.0  | 921.5  | 920.2  | 918.8  | 918.3  | 914.1  | 903.0  | 890.4 | 878.4 | 860.7 |
| 17.5° | 940.1  | 939.2  | 937.8  | 936.9  | 936.4  | 935.9  | 929.9  | 920.6  | 910.9 | 898.8 | 877.4 |
| 20°   | 945.7  | 946.2  | 945.2  | 944.3  | 942.9  | 942.0  | 936.4  | 927.6  | 925.7 | 919.2 | 897.4 |
| 22.5° | 944.8  | 944.8  | 944.3  | 942.5  | 941.5  | 939.2  | 931.3  | 927.1  | 937.3 | 940.1 | 912.3 |
| 25°   | 941.1  | 940.6  | 939.2  | 937.8  | 935.0  | 931.8  | 919.7  | 922.0  | 950.8 | 955.9 | 915.5 |
| 27.5° | 936.9  | 936.4  | 934.1  | 930.8  | 926.7  | 922.0  | 906.7  | 922.0  | 963.4 | 959.2 | 902.0 |
| 30°   | 934.6  | 932.7  | 929.4  | 924.8  | 919.2  | 914.1  | 897.4  | 934.1  | 972.2 | 948.0 | 864.9 |
| 32.5° | 935.0  | 931.8  | 927.1  | 921.1  | 914.6  | 908.5  | 896.9  | 955.5  | 975.4 | 921.1 | 812.4 |
| 35°   | 946.2  | 941.1  | 935.0  | 929.0  | 922.5  | 916.9  | 917.8  | 985.2  | 975.0 | 880.7 | 761.8 |
| 37.5° | 986.6  | 977.8  | 973.6  | 967.1  | 957.8  | 953.1  | 971.7  | 1018.2 | 968.5 | 831.4 | 717.2 |
| 40°   | 1075.8 | 1068.3 | 1062.3 | 1045.6 | 1048.8 | 1045.1 | 1062.8 | 1063.2 | 960.1 | 790.1 | 680.0 |
| 42.5° | 1205.8 | 1205.8 | 1192.8 | 1190.5 | 1181.7 | 1185.8 | 1193.7 | 1116.2 | 951.7 | 765.5 | 643.3 |
| 45°   | 1359.1 | 1370.7 | 1365.6 | 1364.2 | 1371.2 | 1379.5 | 1343.3 | 1178.9 | 952.2 | 744.1 | 600.6 |
| 47.5° | 1541.2 | 1550.9 | 1556.0 | 1564.4 | 1573.2 | 1568.1 | 1493.3 | 1244.8 | 960.6 | 713.5 | 545.8 |
| 50°   | 1734.9 | 1758.6 | 1766.0 | 1776.7 | 1784.6 | 1786.0 | 1635.5 | 1312.6 | 969.4 | 657.3 | 486.3 |
| 52.5° | 1975.0 | 1997.3 | 2005.2 | 2012.6 | 2006.6 | 2001.5 | 1774.8 | 1393.0 | 962.4 | 590.4 | 435.7 |
| 55°   | 2257.4 | 2261.6 | 2260.2 | 2250.9 | 2245.8 | 2217.9 | 1903.9 | 1478.5 | 908.1 | 528.6 | 387.4 |
| 57.5° | 2551.4 | 2553.3 | 2536.6 | 2504.1 | 2466.4 | 2440.0 | 2028.0 | 1549.1 | 792.9 | 478.9 | 339.5 |
| 60°   | 2930.0 | 2891.9 | 2863.6 | 2813.9 | 2752.6 | 2695.9 | 2160.8 | 1588.6 | 682.8 | 431.0 | 285.7 |
| 62.5° | 3387.1 | 3310.9 | 3249.6 | 3199.4 | 3108.8 | 3009.0 | 2330.3 | 1593.7 | 615.9 | 385.5 | 224.3 |
| 65°   | 3978.8 | 3898.5 | 3794.0 | 3708.0 | 3610.0 | 3475.3 | 2603.9 | 1557.0 | 582.9 | 332.6 | 164.0 |
| 67.5° | 4444.7 | 4363.4 | 4246.4 | 4150.2 | 4023.9 | 3866.9 | 2830.6 | 1492.9 | 575.0 | 284.7 | 129.1 |
| 69°   | 4526.0 | 4437.3 | 4331.8 | 4211.5 | 4077.3 | 3909.6 | 2839.4 | 1418.6 | 563.0 | 266.6 | 118.4 |
| 70°   | 4496.3 | 4403.8 | 4302.1 | 4174.4 | 4023.9 | 3851.6 | 2772.5 | 1335.9 | 538.8 | 256.4 | 114.7 |
| 72.5° | 4162.8 | 4022.0 | 3919.8 | 3810.7 | 3627.7 | 3453.0 | 2387.0 | 1010.7 | 419.4 | 216.0 | 107.3 |
| 75°   | 3332.7 | 3212.4 | 3097.2 | 3042.9 | 2891.0 | 2742.8 | 1792.0 | 641.9  | 274.0 | 134.2 | 84.1  |
| 77.5° | 1699.1 | 1677.3 | 1710.3 | 1685.6 | 1576.0 | 1576.0 | 1106.0 | 340.9  | 161.2 | 80.8  | 64.1  |
| 80°   | 305.2  | 318.2  | 312.1  | 325.1  | 302.4  | 335.8  | 388.8  | 229.0  | 114.3 | 61.8  | 52.5  |
| 82.5° | 85.5   | 86.4   | 85.5   | 85.9   | 88.7   | 93.4   | 202.1  | 196.9  | 88.3  | 46.4  | 40.9  |
| 85°   | 39.9   | 40.4   | 41.3   | 41.3   | 45.1   | 46.0   | 135.6  | 141.2  | 51.6  | 25.5  | 27.4  |
| 87.5° | 4.6    | 6.0    | 6.0    | 5.6    | 6.5    | 6.5    | 25.1   | 28.3   | 7.0   | 5.1   | 8.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   |



TEST NUMBER: P148943

CATALOG NUMBER: TLM-F02-LED-E1-RW-8030

**CANDELA DISTRIBUTION (continued):**

|       | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 815.6 | 815.6 | 815.6 | 815.6 |
| 2.5°  | 806.8 | 805.0 | 803.1 | 804.5 |
| 5°    | 809.6 | 806.8 | 804.5 | 805.9 |
| 7.5°  | 817.0 | 812.4 | 811.9 | 811.9 |
| 10°   | 826.3 | 819.8 | 818.0 | 818.0 |
| 12.5° | 836.1 | 827.3 | 824.0 | 824.0 |
| 15°   | 846.3 | 833.8 | 829.1 | 827.7 |
| 17.5° | 857.9 | 840.3 | 831.9 | 831.9 |
| 20°   | 869.1 | 841.2 | 828.7 | 828.2 |
| 22.5° | 870.9 | 830.5 | 812.4 | 811.5 |
| 25°   | 857.0 | 805.4 | 781.7 | 777.1 |
| 27.5° | 824.0 | 766.4 | 741.3 | 740.4 |
| 30°   | 774.3 | 715.3 | 689.8 | 687.0 |
| 32.5° | 725.5 | 662.8 | 639.1 | 639.1 |
| 35°   | 676.3 | 615.0 | 584.3 | 581.1 |
| 37.5° | 630.8 | 564.4 | 537.0 | 536.5 |
| 40°   | 589.0 | 520.2 | 493.8 | 489.6 |
| 42.5° | 547.2 | 473.8 | 443.6 | 442.7 |
| 45°   | 497.5 | 423.2 | 397.1 | 394.8 |
| 47.5° | 444.5 | 377.6 | 350.2 | 349.8 |
| 50°   | 396.7 | 335.4 | 308.0 | 308.0 |
| 52.5° | 353.0 | 294.0 | 266.6 | 263.8 |
| 55°   | 303.8 | 247.1 | 219.2 | 216.0 |
| 57.5° | 250.4 | 194.6 | 169.5 | 162.6 |
| 60°   | 193.7 | 141.7 | 116.1 | 112.4 |
| 62.5° | 141.2 | 103.6 | 84.5  | 81.8  |
| 65°   | 106.4 | 88.3  | 72.5  | 69.7  |
| 67.5° | 91.5  | 79.4  | 66.0  | 63.2  |
| 69°   | 85.0  | 75.2  | 63.2  | 60.4  |
| 70°   | 82.2  | 72.5  | 60.8  | 58.5  |
| 72.5° | 75.7  | 66.4  | 55.7  | 54.8  |
| 75°   | 69.2  | 60.4  | 50.2  | 48.8  |
| 77.5° | 66.9  | 52.5  | 43.2  | 42.3  |
| 80°   | 68.3  | 42.7  | 35.3  | 34.4  |
| 82.5° | 55.7  | 34.4  | 27.4  | 26.0  |
| 85°   | 34.8  | 23.2  | 14.4  | 14.4  |
| 87.5° | 8.8   | 7.4   | 4.2   | 4.2   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)