

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: STREETWORKS

Report Number: P177425

Luminaire Tested: **VAL-F03-LED-E-U-GL2-7060**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P177425  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33701)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VAL-F03-LED-E-U-GL2-7060  
Description: VALET TUNNEL LED LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE II W/ GLARE CONTROL  
Light Source: (21) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 7440.7 lumens  
Efficiency: N/A  
Efficacy: 95.0 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 78.3  
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: 28.75 FT

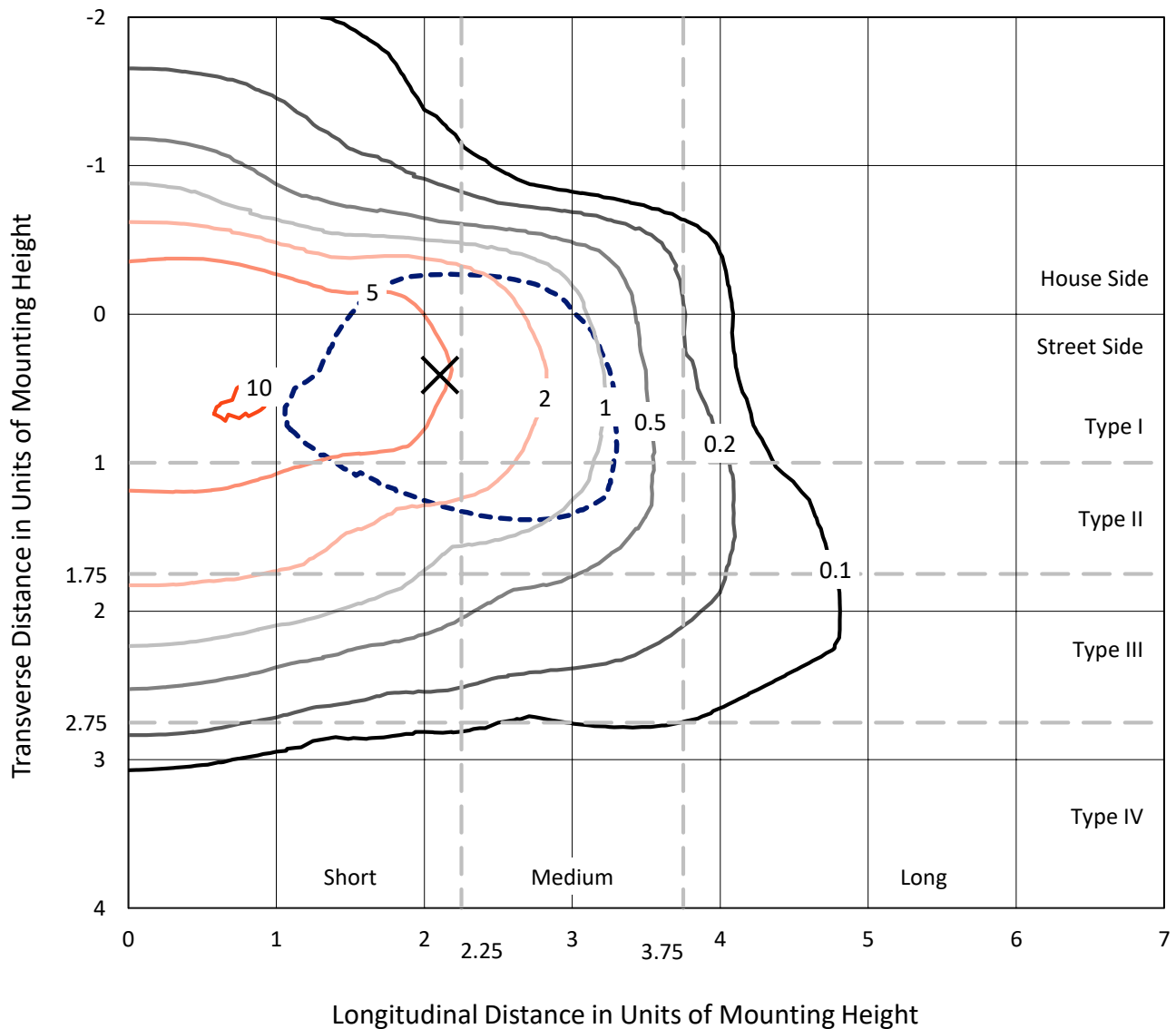


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

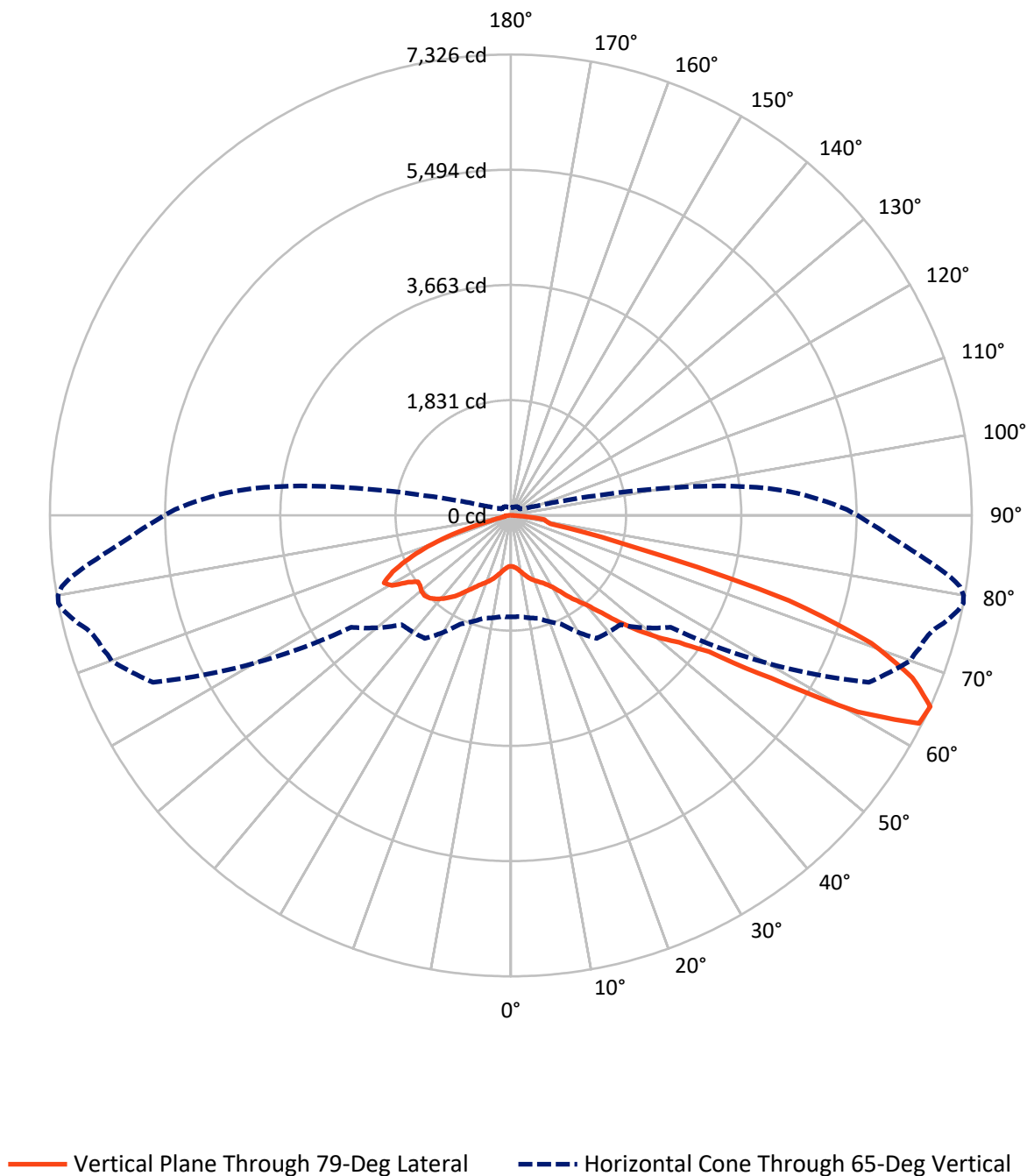


Based on 10 foot mounting height. Maximum calculated value = 10.4 fc  
 Type II - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1688.9   | 0.0    | 1688.9 |
|                    | % Fixture | 22.7     | 0.0    | 22.7   |
| <b>Street Side</b> | Lumens    | 5751.7   | 0.0    | 5751.7 |
|                    | % Fixture | 77.3     | 0.0    | 77.3   |
| <b>Total</b>       | Lumens    | 7440.7   | 0.0    | 7440.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 80.3   | 1.1       |
| 10°-20°   | 261.3  | 3.5       |
| 20°-30°   | 450.4  | 6.1       |
| 30°-40°   | 734.5  | 9.9       |
| 40°-50°   | 1226.3 | 16.5      |
| 50°-60°   | 1658.1 | 22.3      |
| 60°-70°   | 2059.9 | 27.7      |
| 70°-80°   | 824.9  | 11.1      |
| 80°-90°   | 144.9  | 1.9       |
| 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°-90°    | 7440.7 | 100.0     |
| 0°-180°   | 7440.7 | 100.0     |

**Coefficient of Utilization**



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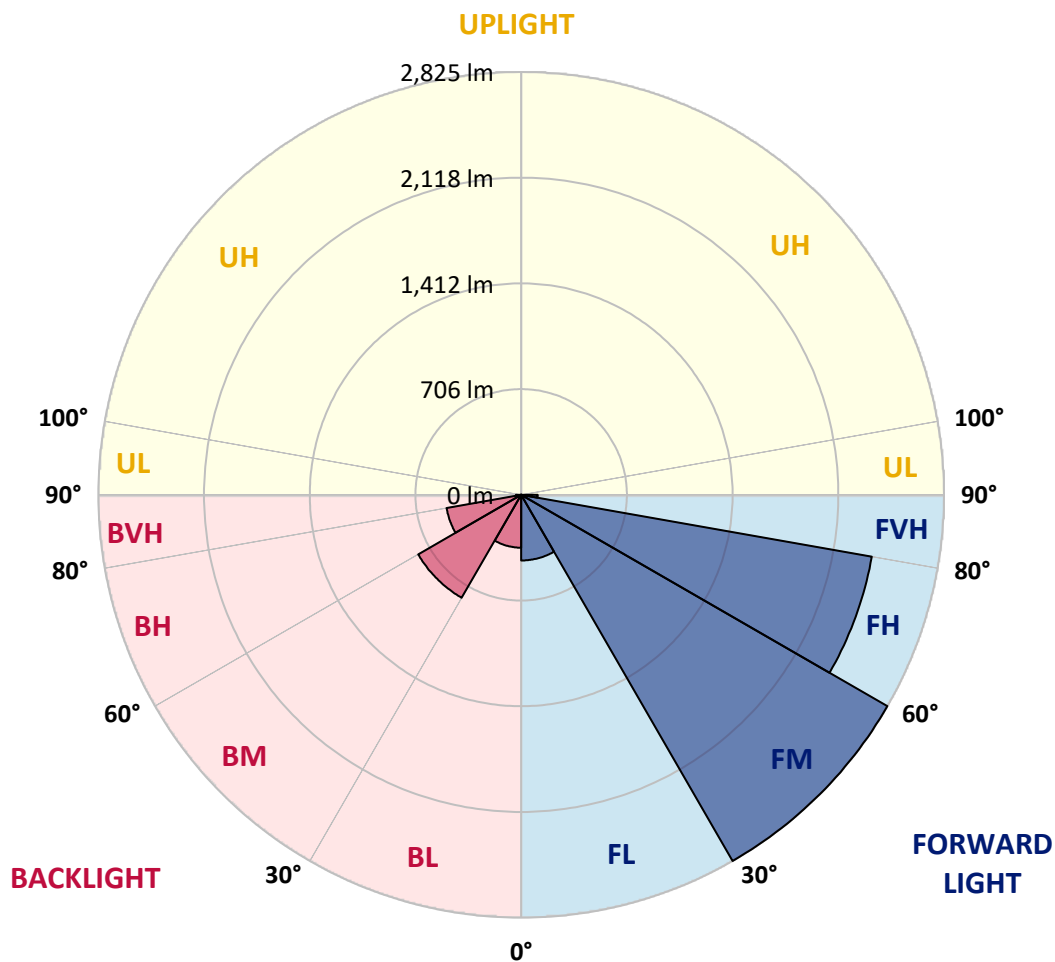
CATALOG NUMBER: VAL-F03-LED-E-U-GL2-7060

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 438.8  | 5.9       |                         |      |         |
| FM   | (30°-60°)   | 2824.6 | 38.0      |                         |      |         |
| FH   | (60°-80°)   | 2378.5 | 32.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 109.9  | 1.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 353.2  | 4.7       | B1/500                  |      |         |
| BM   | (30°-60°)   | 794.4  | 10.7      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 506.3  | 6.8       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 35.0   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 70°    | 71°    | 72°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  |
| 2.5°  | 814.7  | 814.2  | 816.8  | 818.8  | 818.8  | 819.8  | 819.3  | 816.2  | 816.8  | 817.8  | 816.8  |
| 5°    | 823.9  | 821.8  | 824.4  | 827.4  | 829.5  | 832.0  | 834.5  | 835.0  | 837.1  | 837.1  | 836.6  |
| 7.5°  | 843.7  | 842.2  | 845.7  | 846.7  | 851.3  | 855.4  | 860.5  | 864.0  | 866.1  | 867.1  | 868.6  |
| 10°   | 877.7  | 876.7  | 877.7  | 879.8  | 881.8  | 886.4  | 895.0  | 902.6  | 907.2  | 907.2  | 909.3  |
| 12.5° | 918.9  | 914.8  | 915.9  | 911.8  | 912.8  | 922.5  | 932.6  | 945.3  | 953.0  | 954.0  | 955.0  |
| 15°   | 950.9  | 948.9  | 947.4  | 941.8  | 945.8  | 958.6  | 974.3  | 992.6  | 999.2  | 1004.8 | 1004.3 |
| 17.5° | 980.9  | 978.4  | 974.8  | 967.2  | 971.3  | 991.6  | 1015.5 | 1035.8 | 1047.0 | 1048.0 | 1049.0 |
| 20°   | 1016.5 | 1013.4 | 1006.8 | 991.1  | 990.1  | 1018.5 | 1050.5 | 1072.4 | 1082.6 | 1087.1 | 1088.7 |
| 22.5° | 1061.7 | 1057.7 | 1045.5 | 1015.0 | 1006.8 | 1040.4 | 1078.5 | 1105.4 | 1116.1 | 1120.7 | 1123.2 |
| 25°   | 1119.7 | 1111.5 | 1092.2 | 1044.4 | 1027.7 | 1062.7 | 1108.5 | 1141.0 | 1155.7 | 1160.3 | 1163.4 |
| 27.5° | 1172.0 | 1165.9 | 1142.5 | 1086.1 | 1057.2 | 1092.7 | 1145.1 | 1186.8 | 1207.1 | 1212.7 | 1217.2 |
| 30°   | 1233.0 | 1224.4 | 1205.6 | 1145.6 | 1107.0 | 1138.5 | 1205.0 | 1257.9 | 1282.8 | 1283.3 | 1293.5 |
| 32.5° | 1376.3 | 1370.7 | 1353.5 | 1287.4 | 1222.3 | 1224.4 | 1286.4 | 1359.0 | 1384.0 | 1388.0 | 1397.2 |
| 35°   | 1588.8 | 1586.7 | 1586.2 | 1549.6 | 1501.4 | 1451.5 | 1456.1 | 1511.5 | 1528.3 | 1534.9 | 1538.0 |
| 37.5° | 1728.5 | 1746.3 | 1789.5 | 1816.0 | 1803.8 | 1814.4 | 1758.5 | 1690.9 | 1681.3 | 1674.2 | 1677.2 |
| 40°   | 1849.0 | 1864.8 | 1952.2 | 2074.1 | 2148.4 | 2200.7 | 2151.4 | 1944.0 | 1866.8 | 1844.4 | 1835.8 |
| 42.5° | 1920.2 | 1937.9 | 2063.0 | 2258.1 | 2447.2 | 2571.2 | 2584.4 | 2296.3 | 2100.1 | 2097.5 | 2065.0 |
| 45°   | 1958.8 | 1976.6 | 2126.0 | 2388.8 | 2656.1 | 2879.7 | 2995.6 | 2729.8 | 2441.6 | 2420.3 | 2375.0 |
| 47.5° | 1951.2 | 1967.9 | 2123.4 | 2437.0 | 2779.6 | 3084.5 | 3316.3 | 3167.9 | 2835.5 | 2784.2 | 2721.7 |
| 50°   | 1858.1 | 1870.3 | 2033.5 | 2358.3 | 2746.6 | 3169.9 | 3535.9 | 3569.9 | 3281.2 | 3211.6 | 3118.1 |
| 52.5° | 1762.1 | 1783.9 | 1919.1 | 2218.5 | 2596.6 | 3117.1 | 3667.0 | 3935.9 | 3697.5 | 3649.7 | 3529.8 |
| 55°   | 1710.2 | 1727.5 | 1837.8 | 2093.5 | 2438.6 | 2936.6 | 3721.4 | 4281.0 | 4203.2 | 4183.9 | 4099.0 |
| 57.5° | 1708.2 | 1725.0 | 1812.9 | 2017.7 | 2310.0 | 2748.6 | 3737.1 | 4814.1 | 5042.3 | 5047.4 | 5023.0 |
| 60°   | 1791.6 | 1808.8 | 1882.5 | 2054.3 | 2270.3 | 2587.5 | 3680.7 | 5570.4 | 6074.5 | 6119.3 | 6194.0 |
| 62.5° | 1803.3 | 1811.4 | 1900.3 | 2132.1 | 2414.7 | 2467.0 | 3448.4 | 6200.1 | 6784.1 | 6825.2 | 6866.4 |
| 65°   | 1613.2 | 1612.7 | 1691.4 | 1904.9 | 2384.7 | 2454.8 | 3099.3 | 6277.3 | 6755.6 | 6780.5 | 6831.8 |
| 67.5° | 1203.0 | 1192.9 | 1237.6 | 1432.7 | 1892.2 | 2457.9 | 2685.6 | 5694.4 | 6229.1 | 6276.3 | 6293.6 |
| 70°   | 620.1  | 635.8  | 666.3  | 785.7  | 1201.5 | 1978.6 | 2306.9 | 4804.4 | 5468.2 | 5486.0 | 5547.5 |
| 72.5° | 254.6  | 248.0  | 268.9  | 330.4  | 601.3  | 1307.7 | 1908.5 | 3791.5 | 4516.3 | 4504.1 | 4515.3 |
| 75°   | 141.8  | 143.8  | 149.9  | 172.3  | 292.2  | 656.7  | 1639.6 | 2684.0 | 3071.3 | 2860.9 | 2797.4 |
| 77.5° | 113.8  | 114.9  | 115.4  | 119.4  | 159.6  | 350.2  | 1258.4 | 1767.7 | 1544.6 | 1434.3 | 1392.1 |
| 80°   | 83.4   | 88.9   | 95.0   | 96.1   | 109.8  | 198.7  | 690.2  | 1488.1 | 1303.6 | 1212.2 | 1136.9 |
| 82.5° | 67.1   | 69.6   | 82.8   | 84.9   | 87.4   | 118.4  | 312.6  | 1397.7 | 1298.6 | 1205.0 | 1101.4 |
| 85°   | 40.2   | 44.7   | 67.6   | 68.1   | 69.1   | 72.2   | 172.8  | 569.2  | 708.0  | 625.7  | 572.8  |
| 87.5° | 14.2   | 18.3   | 33.5   | 28.0   | 35.6   | 29.5   | 75.7   | 190.6  | 234.8  | 223.1  | 197.7  |
| 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°    | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  |
| 2.5°  | 816.2  | 816.2  | 817.3  | 816.8  | 816.8  | 816.8  | 816.8  | 815.7  | 815.7  | 814.2  | 815.2  |
| 5°    | 836.6  | 836.1  | 836.6  | 837.1  | 836.6  | 837.6  | 837.1  | 836.6  | 837.1  | 836.6  | 837.1  |
| 7.5°  | 869.1  | 866.6  | 870.1  | 868.1  | 867.6  | 870.6  | 869.1  | 870.6  | 871.1  | 870.6  | 870.1  |
| 10°   | 910.3  | 911.8  | 911.8  | 911.8  | 910.8  | 913.8  | 914.3  | 915.3  | 915.9  | 917.9  | 917.9  |
| 12.5° | 957.5  | 958.0  | 960.1  | 959.6  | 960.6  | 964.1  | 966.7  | 967.2  | 967.7  | 969.2  | 967.2  |
| 15°   | 1008.4 | 1009.4 | 1009.4 | 1013.9 | 1012.4 | 1017.5 | 1019.0 | 1019.0 | 1019.5 | 1025.6 | 1026.1 |
| 17.5° | 1053.6 | 1053.6 | 1057.7 | 1057.7 | 1061.7 | 1062.7 | 1067.3 | 1067.8 | 1069.9 | 1075.4 | 1076.0 |
| 20°   | 1091.7 | 1093.7 | 1096.3 | 1099.3 | 1100.9 | 1103.9 | 1107.0 | 1110.0 | 1112.5 | 1117.1 | 1117.6 |
| 22.5° | 1127.8 | 1129.8 | 1133.9 | 1135.9 | 1139.5 | 1141.5 | 1144.1 | 1147.6 | 1151.7 | 1157.8 | 1159.3 |
| 25°   | 1169.5 | 1171.5 | 1176.1 | 1179.1 | 1183.2 | 1186.2 | 1190.8 | 1195.4 | 1197.9 | 1204.0 | 1208.6 |
| 27.5° | 1222.3 | 1228.4 | 1234.5 | 1236.1 | 1239.1 | 1246.2 | 1252.3 | 1258.4 | 1264.0 | 1267.1 | 1272.6 |
| 30°   | 1299.6 | 1299.6 | 1312.3 | 1312.3 | 1317.9 | 1324.5 | 1328.6 | 1335.2 | 1345.3 | 1348.4 | 1355.5 |
| 32.5° | 1403.3 | 1405.8 | 1410.4 | 1424.1 | 1434.3 | 1437.3 | 1440.4 | 1450.0 | 1456.1 | 1463.7 | 1472.4 |
| 35°   | 1551.2 | 1553.7 | 1556.2 | 1569.5 | 1581.2 | 1584.2 | 1587.3 | 1593.3 | 1603.5 | 1616.7 | 1612.7 |
| 37.5° | 1683.8 | 1685.3 | 1693.5 | 1708.2 | 1714.8 | 1723.0 | 1725.5 | 1736.7 | 1742.3 | 1754.5 | 1755.0 |
| 40°   | 1843.4 | 1839.8 | 1844.4 | 1861.2 | 1871.4 | 1870.9 | 1879.0 | 1899.3 | 1903.4 | 1909.0 | 1923.2 |
| 42.5° | 2066.0 | 2052.8 | 2067.0 | 2072.6 | 2087.9 | 2097.5 | 2113.8 | 2127.5 | 2137.2 | 2158.5 | 2168.7 |
| 45°   | 2353.7 | 2340.0 | 2351.7 | 2354.2 | 2385.7 | 2395.4 | 2419.8 | 2438.1 | 2458.9 | 2483.3 | 2490.4 |
| 47.5° | 2681.5 | 2656.1 | 2641.9 | 2657.6 | 2695.2 | 2711.0 | 2734.9 | 2752.1 | 2774.0 | 2786.7 | 2782.6 |
| 50°   | 3061.2 | 3000.2 | 2971.7 | 2963.6 | 2990.5 | 3012.9 | 3050.0 | 3058.1 | 3068.3 | 3067.8 | 3068.3 |
| 52.5° | 3484.5 | 3421.0 | 3361.5 | 3320.4 | 3316.3 | 3346.3 | 3355.4 | 3357.5 | 3354.4 | 3331.5 | 3317.3 |
| 55°   | 4037.5 | 4032.9 | 3970.4 | 3885.0 | 3879.4 | 3875.9 | 3822.5 | 3815.9 | 3803.7 | 3768.6 | 3720.4 |
| 57.5° | 5040.8 | 5091.6 | 5050.4 | 5048.4 | 5003.7 | 4974.2 | 4876.1 | 4827.3 | 4776.0 | 4680.9 | 4605.2 |
| 60°   | 6200.6 | 6274.3 | 6314.9 | 6332.7 | 6420.2 | 6420.2 | 6339.9 | 6270.7 | 6187.4 | 6042.5 | 5901.2 |
| 62.5° | 6898.9 | 6963.5 | 7023.4 | 7117.5 | 7228.8 | 7278.1 | 7282.1 | 7220.6 | 7115.4 | 6950.3 | 6750.5 |
| 65°   | 6854.7 | 6902.5 | 6975.2 | 7086.0 | 7177.9 | 7266.4 | 7325.8 | 7307.0 | 7226.7 | 7061.6 | 6844.0 |
| 67.5° | 6354.1 | 6423.7 | 6517.7 | 6619.9 | 6705.3 | 6788.6 | 6884.7 | 6891.8 | 6870.5 | 6713.4 | 6516.7 |
| 70°   | 5581.6 | 5671.0 | 5730.5 | 5859.1 | 5897.7 | 5982.0 | 6078.6 | 6124.9 | 6090.3 | 5969.3 | 5854.0 |
| 72.5° | 4534.6 | 4605.2 | 4615.4 | 4559.5 | 4578.8 | 4599.6 | 4623.0 | 4514.7 | 4473.1 | 4311.4 | 4237.2 |
| 75°   | 2749.6 | 2656.6 | 2578.3 | 2500.6 | 2268.3 | 2186.0 | 2059.4 | 1809.9 | 1781.4 | 1610.1 | 1491.2 |
| 77.5° | 1307.7 | 1268.6 | 1197.9 | 1079.5 | 922.0  | 771.0  | 639.9  | 519.9  | 475.2  | 391.3  | 333.4  |
| 80°   | 1094.8 | 1048.0 | 984.5  | 896.5  | 786.3  | 676.5  | 572.8  | 483.8  | 394.4  | 321.2  | 256.7  |
| 82.5° | 1004.3 | 923.0  | 833.5  | 757.8  | 680.0  | 605.3  | 535.7  | 455.4  | 408.1  | 329.3  | 268.9  |
| 85°   | 507.7  | 444.7  | 360.3  | 303.4  | 256.2  | 208.4  | 180.4  | 154.0  | 137.2  | 109.3  | 95.0   |
| 87.5° | 170.3  | 139.3  | 103.7  | 87.9   | 79.3   | 68.1   | 62.5   | 59.5   | 57.9   | 51.3   | 45.7   |
| 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):**

|       | 84°    | 85°    | 86°    | 87°    | 88°    | 89°    | 90°    | 91°    | 92°    | 93°    | 94°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  |
| 2.5°  | 815.2  | 815.2  | 815.2  | 815.2  | 814.7  | 814.7  | 814.7  | 814.7  | 814.7  | 814.7  | 815.2  |
| 5°    | 836.1  | 836.1  | 836.6  | 838.1  | 835.0  | 836.1  | 837.1  | 835.6  | 837.1  | 835.6  | 837.6  |
| 7.5°  | 869.6  | 871.1  | 870.1  | 872.1  | 871.1  | 874.2  | 872.1  | 870.6  | 871.6  | 871.6  | 872.1  |
| 10°   | 916.9  | 918.9  | 917.4  | 918.4  | 918.4  | 920.4  | 917.9  | 918.4  | 918.9  | 917.9  | 918.4  |
| 12.5° | 969.2  | 970.2  | 969.7  | 972.8  | 971.3  | 972.8  | 971.3  | 973.3  | 974.3  | 975.3  | 975.3  |
| 15°   | 1026.1 | 1027.2 | 1030.2 | 1029.7 | 1032.8 | 1031.7 | 1032.2 | 1029.7 | 1034.8 | 1031.7 | 1032.8 |
| 17.5° | 1078.5 | 1078.0 | 1082.1 | 1083.6 | 1084.1 | 1084.6 | 1086.1 | 1084.1 | 1084.6 | 1086.1 | 1085.1 |
| 20°   | 1119.2 | 1122.7 | 1123.7 | 1127.8 | 1130.8 | 1131.9 | 1131.4 | 1132.9 | 1134.9 | 1132.9 | 1132.9 |
| 22.5° | 1162.4 | 1167.4 | 1169.0 | 1171.5 | 1174.6 | 1175.1 | 1178.1 | 1179.6 | 1180.7 | 1180.1 | 1180.7 |
| 25°   | 1214.2 | 1217.8 | 1221.3 | 1226.4 | 1230.0 | 1230.5 | 1233.0 | 1235.0 | 1235.5 | 1235.0 | 1238.1 |
| 27.5° | 1277.7 | 1282.3 | 1286.9 | 1293.0 | 1297.0 | 1298.1 | 1303.6 | 1303.6 | 1306.7 | 1308.2 | 1309.2 |
| 30°   | 1359.6 | 1361.1 | 1372.8 | 1378.9 | 1377.3 | 1384.5 | 1392.1 | 1391.6 | 1395.1 | 1396.2 | 1398.7 |
| 32.5° | 1478.5 | 1478.5 | 1488.7 | 1496.3 | 1504.4 | 1501.9 | 1513.6 | 1511.5 | 1517.1 | 1520.2 | 1518.6 |
| 35°   | 1622.8 | 1627.9 | 1635.5 | 1640.1 | 1648.7 | 1653.3 | 1661.5 | 1666.0 | 1668.6 | 1668.1 | 1662.5 |
| 37.5° | 1771.7 | 1779.9 | 1782.9 | 1794.1 | 1802.7 | 1810.4 | 1811.4 | 1806.3 | 1808.3 | 1798.2 | 1795.1 |
| 40°   | 1942.0 | 1953.7 | 1960.8 | 1977.6 | 1976.6 | 1986.2 | 1987.2 | 1972.5 | 1970.0 | 1956.7 | 1943.0 |
| 42.5° | 2179.9 | 2196.1 | 2201.7 | 2214.4 | 2204.3 | 2208.8 | 2183.4 | 2177.3 | 2157.0 | 2135.6 | 2104.6 |
| 45°   | 2500.6 | 2492.4 | 2496.0 | 2492.4 | 2465.5 | 2445.7 | 2424.8 | 2394.9 | 2364.9 | 2323.7 | 2279.5 |
| 47.5° | 2782.6 | 2786.7 | 2760.3 | 2743.5 | 2699.8 | 2671.8 | 2633.7 | 2581.4 | 2544.8 | 2489.4 | 2430.9 |
| 50°   | 3056.6 | 3011.4 | 2974.3 | 2935.6 | 2897.0 | 2845.7 | 2788.2 | 2742.0 | 2688.6 | 2619.5 | 2547.8 |
| 52.5° | 3279.2 | 3220.8 | 3176.0 | 3121.1 | 3068.8 | 3011.9 | 2951.9 | 2884.8 | 2814.7 | 2745.5 | 2657.1 |
| 55°   | 3673.6 | 3588.7 | 3531.3 | 3435.2 | 3375.8 | 3296.0 | 3249.2 | 3162.3 | 3064.7 | 2973.2 | 2879.2 |
| 57.5° | 4519.8 | 4392.8 | 4327.2 | 4272.8 | 4180.3 | 4049.2 | 3965.8 | 3823.0 | 3683.8 | 3586.2 | 3429.6 |
| 60°   | 5794.5 | 5665.4 | 5556.6 | 5428.1 | 5286.3 | 5108.4 | 5029.1 | 4860.9 | 4661.6 | 4500.5 | 4293.7 |
| 62.5° | 6588.9 | 6410.5 | 6234.1 | 6053.7 | 5911.4 | 5772.1 | 5608.0 | 5438.2 | 5241.0 | 5022.0 | 4795.8 |
| 65°   | 6620.9 | 6406.9 | 6196.0 | 6012.0 | 5845.3 | 5664.4 | 5510.4 | 5338.1 | 5130.7 | 4905.1 | 4670.3 |
| 67.5° | 6288.5 | 6049.1 | 5823.0 | 5621.2 | 5430.6 | 5262.9 | 5101.8 | 4939.6 | 4717.5 | 4528.5 | 4288.1 |
| 70°   | 5626.3 | 5407.7 | 5202.9 | 4973.2 | 4827.3 | 4638.8 | 4481.7 | 4310.9 | 4151.9 | 3975.0 | 3749.8 |
| 72.5° | 4132.5 | 3967.9 | 3734.1 | 3636.5 | 3558.2 | 3358.5 | 3241.6 | 3227.4 | 3125.7 | 2913.8 | 2745.5 |
| 75°   | 1536.9 | 1308.2 | 1239.1 | 1280.3 | 1211.7 | 1234.5 | 1225.9 | 1177.1 | 1179.1 | 1143.0 | 1100.4 |
| 77.5° | 300.9  | 279.5  | 262.8  | 267.3  | 248.5  | 240.4  | 257.7  | 252.6  | 243.4  | 246.0  | 241.9  |
| 80°   | 204.8  | 173.3  | 157.0  | 150.9  | 143.3  | 139.8  | 138.8  | 137.2  | 134.2  | 132.7  | 128.1  |
| 82.5° | 201.8  | 149.9  | 118.4  | 101.6  | 95.6   | 92.5   | 90.0   | 89.5   | 88.4   | 87.9   | 89.5   |
| 85°   | 80.3   | 65.1   | 59.5   | 54.4   | 52.9   | 51.3   | 51.3   | 50.8   | 50.3   | 51.3   | 53.4   |
| 87.5° | 39.1   | 33.0   | 30.0   | 27.4   | 26.4   | 25.9   | 25.9   | 26.4   | 26.9   | 29.0   | 33.0   |
| 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):**

|       | 95°    | 96°    | 97°    | 98°    | 99°    | 100°   | 101°   | 102°   | 103°   | 104°   | 105°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  |
| 2.5°  | 814.2  | 814.7  | 813.7  | 814.2  | 813.7  | 812.7  | 812.2  | 813.7  | 813.2  | 812.7  | 812.7  |
| 5°    | 835.0  | 837.1  | 836.1  | 835.0  | 835.0  | 834.5  | 834.5  | 834.5  | 834.0  | 834.5  | 833.0  |
| 7.5°  | 871.1  | 870.6  | 870.6  | 869.6  | 868.6  | 869.6  | 869.1  | 867.6  | 868.1  | 867.1  | 865.5  |
| 10°   | 917.4  | 915.9  | 918.4  | 918.4  | 916.4  | 915.9  | 914.8  | 913.3  | 913.3  | 911.8  | 911.8  |
| 12.5° | 972.3  | 970.7  | 974.3  | 971.8  | 968.7  | 968.2  | 965.2  | 964.1  | 965.7  | 965.2  | 964.1  |
| 15°   | 1028.2 | 1028.7 | 1030.2 | 1029.7 | 1026.1 | 1026.1 | 1022.1 | 1022.6 | 1019.5 | 1018.5 | 1016.0 |
| 17.5° | 1082.6 | 1083.1 | 1081.5 | 1081.5 | 1079.0 | 1077.5 | 1072.9 | 1073.4 | 1071.4 | 1067.3 | 1064.3 |
| 20°   | 1131.4 | 1130.8 | 1127.3 | 1130.3 | 1125.3 | 1124.2 | 1120.2 | 1116.1 | 1117.1 | 1113.1 | 1107.0 |
| 22.5° | 1179.1 | 1178.1 | 1177.1 | 1175.6 | 1173.0 | 1172.0 | 1167.4 | 1166.9 | 1161.8 | 1155.7 | 1150.7 |
| 25°   | 1234.5 | 1234.0 | 1232.5 | 1233.0 | 1227.9 | 1228.4 | 1220.3 | 1218.3 | 1215.2 | 1208.6 | 1204.5 |
| 27.5° | 1306.2 | 1306.2 | 1302.1 | 1300.6 | 1299.1 | 1297.0 | 1289.9 | 1284.8 | 1277.2 | 1269.6 | 1261.5 |
| 30°   | 1394.1 | 1393.1 | 1392.1 | 1388.0 | 1382.4 | 1379.4 | 1366.7 | 1358.5 | 1348.4 | 1334.1 | 1321.9 |
| 32.5° | 1519.7 | 1511.0 | 1503.9 | 1494.7 | 1485.6 | 1475.9 | 1456.1 | 1442.4 | 1426.1 | 1403.3 | 1384.0 |
| 35°   | 1659.4 | 1644.7 | 1637.1 | 1618.3 | 1601.0 | 1581.7 | 1557.8 | 1529.8 | 1507.5 | 1477.5 | 1446.0 |
| 37.5° | 1774.8 | 1763.6 | 1743.3 | 1721.9 | 1697.5 | 1660.9 | 1634.0 | 1604.0 | 1564.9 | 1531.9 | 1493.7 |
| 40°   | 1917.1 | 1891.7 | 1862.7 | 1827.1 | 1793.6 | 1752.4 | 1715.3 | 1672.1 | 1624.4 | 1576.6 | 1526.8 |
| 42.5° | 2066.5 | 2027.4 | 1979.6 | 1938.4 | 1887.6 | 1833.7 | 1785.5 | 1727.0 | 1666.0 | 1602.0 | 1535.4 |
| 45°   | 2219.0 | 2170.7 | 2107.2 | 2048.7 | 1978.1 | 1910.5 | 1841.4 | 1761.6 | 1678.2 | 1592.8 | 1509.0 |
| 47.5° | 2358.8 | 2288.1 | 2215.9 | 2137.2 | 2055.9 | 1968.9 | 1870.9 | 1766.2 | 1656.4 | 1544.0 | 1439.4 |
| 50°   | 2468.5 | 2380.1 | 2289.1 | 2198.2 | 2098.5 | 1985.7 | 1862.2 | 1725.5 | 1590.3 | 1455.6 | 1335.2 |
| 52.5° | 2565.6 | 2466.5 | 2354.7 | 2241.9 | 2118.9 | 1980.1 | 1825.6 | 1664.5 | 1499.8 | 1350.9 | 1215.7 |
| 55°   | 2753.7 | 2629.2 | 2481.8 | 2336.4 | 2180.9 | 2006.0 | 1813.4 | 1616.2 | 1426.6 | 1264.5 | 1120.7 |
| 57.5° | 3264.5 | 3096.2 | 2868.0 | 2666.3 | 2469.1 | 2214.4 | 1943.0 | 1700.1 | 1458.7 | 1267.1 | 1107.0 |
| 60°   | 4069.0 | 3795.1 | 3533.8 | 3226.3 | 2907.2 | 2558.0 | 2194.1 | 1866.8 | 1572.5 | 1332.1 | 1139.5 |
| 62.5° | 4535.6 | 4246.4 | 3910.4 | 3537.9 | 3124.2 | 2698.8 | 2281.0 | 1898.8 | 1576.1 | 1314.3 | 1100.9 |
| 65°   | 4409.5 | 4118.8 | 3749.3 | 3368.1 | 2928.0 | 2492.9 | 2078.2 | 1711.3 | 1398.2 | 1156.3 | 951.9  |
| 67.5° | 4035.5 | 3731.5 | 3384.4 | 2961.5 | 2540.7 | 2137.7 | 1759.5 | 1413.9 | 1136.9 | 911.3  | 730.9  |
| 70°   | 3491.1 | 3220.8 | 2886.3 | 2496.5 | 2088.4 | 1726.0 | 1407.3 | 1095.8 | 861.5  | 654.6  | 512.3  |
| 72.5° | 2591.0 | 2351.7 | 2142.8 | 1817.0 | 1518.1 | 1234.0 | 974.3  | 762.4  | 560.6  | 423.9  | 326.3  |
| 75°   | 1087.6 | 1006.8 | 972.8  | 853.3  | 742.0  | 608.4  | 457.9  | 364.9  | 295.8  | 251.6  | 199.7  |
| 77.5° | 263.8  | 263.8  | 248.0  | 232.3  | 213.5  | 193.1  | 170.8  | 152.5  | 143.3  | 135.2  | 128.6  |
| 80°   | 128.1  | 127.1  | 123.0  | 122.5  | 118.9  | 114.4  | 111.8  | 108.3  | 106.7  | 104.7  | 103.7  |
| 82.5° | 90.0   | 89.5   | 87.9   | 90.0   | 89.5   | 91.5   | 92.5   | 93.0   | 93.0   | 93.5   | 94.0   |
| 85°   | 56.9   | 59.0   | 63.0   | 68.1   | 72.7   | 78.3   | 83.4   | 87.4   | 90.5   | 93.0   | 95.0   |
| 87.5° | 36.1   | 41.2   | 44.2   | 51.8   | 59.5   | 68.1   | 77.8   | 81.8   | 85.4   | 85.9   | 82.8   |
| 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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CATALOG NUMBER: VAL-F03-LED-E-U-GL2-7060

**CANDELA DISTRIBUTION (continued):**

|       | 106°   | 107°   | 108°   | 109°   | 110°   | 115°   | 125°  | 135°  | 145°  | 155°  | 165°  |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 0°    | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6  | 808.6 | 808.6 | 808.6 | 808.6 | 808.6 |
| 2.5°  | 812.7  | 812.2  | 813.2  | 812.2  | 812.2  | 811.7  | 810.1 | 808.6 | 807.1 | 806.6 | 805.1 |
| 5°    | 832.5  | 832.5  | 833.5  | 831.5  | 832.0  | 830.0  | 825.4 | 820.3 | 815.7 | 811.7 | 807.1 |
| 7.5°  | 866.1  | 864.5  | 865.0  | 864.5  | 863.5  | 859.4  | 849.3 | 836.6 | 824.4 | 811.7 | 801.5 |
| 10°   | 910.8  | 907.7  | 907.7  | 906.7  | 905.2  | 899.6  | 878.2 | 852.8 | 827.4 | 804.6 | 787.8 |
| 12.5° | 960.6  | 961.1  | 957.0  | 954.5  | 951.9  | 940.3  | 908.2 | 867.6 | 827.4 | 790.8 | 763.9 |
| 15°   | 1012.4 | 1011.9 | 1007.3 | 1005.8 | 1000.2 | 982.9  | 934.7 | 875.2 | 817.8 | 763.9 | 723.7 |
| 17.5° | 1059.2 | 1057.2 | 1052.6 | 1049.5 | 1043.4 | 1020.6 | 952.5 | 871.6 | 792.4 | 721.7 | 671.4 |
| 20°   | 1101.9 | 1099.3 | 1095.3 | 1089.7 | 1083.6 | 1050.5 | 959.1 | 853.3 | 752.2 | 671.4 | 620.6 |
| 22.5° | 1146.1 | 1140.5 | 1135.9 | 1128.3 | 1121.7 | 1077.5 | 954.5 | 820.8 | 706.5 | 615.5 | 561.1 |
| 25°   | 1195.4 | 1188.8 | 1179.1 | 1170.0 | 1159.8 | 1099.3 | 941.8 | 780.2 | 651.6 | 555.0 | 500.1 |
| 27.5° | 1248.8 | 1239.1 | 1226.4 | 1214.7 | 1198.4 | 1115.6 | 919.9 | 734.9 | 591.6 | 495.0 | 438.1 |
| 30°   | 1305.2 | 1287.4 | 1271.6 | 1253.8 | 1233.0 | 1123.2 | 888.4 | 679.0 | 525.5 | 434.0 | 377.1 |
| 32.5° | 1360.1 | 1336.2 | 1312.8 | 1286.9 | 1258.4 | 1120.2 | 843.7 | 612.9 | 459.5 | 377.1 | 329.3 |
| 35°   | 1416.0 | 1381.4 | 1348.9 | 1313.8 | 1279.3 | 1104.9 | 782.2 | 539.8 | 396.9 | 329.9 | 295.3 |
| 37.5° | 1454.1 | 1410.9 | 1367.7 | 1325.5 | 1283.8 | 1071.9 | 700.4 | 457.9 | 340.5 | 295.8 | 270.9 |
| 40°   | 1473.4 | 1420.5 | 1367.7 | 1315.3 | 1264.0 | 1017.0 | 604.8 | 383.2 | 300.4 | 270.4 | 252.6 |
| 42.5° | 1467.8 | 1402.2 | 1336.7 | 1274.7 | 1211.7 | 929.6  | 501.1 | 321.7 | 272.4 | 250.6 | 234.8 |
| 45°   | 1421.6 | 1343.3 | 1268.6 | 1203.0 | 1124.2 | 817.3  | 411.7 | 283.6 | 251.1 | 234.3 | 219.6 |
| 47.5° | 1334.7 | 1247.2 | 1155.7 | 1081.5 | 1007.9 | 687.1  | 342.6 | 259.7 | 232.3 | 218.5 | 203.8 |
| 50°   | 1223.9 | 1122.7 | 1031.2 | 950.9  | 878.8  | 565.7  | 295.3 | 239.4 | 217.0 | 205.3 | 189.6 |
| 52.5° | 1101.9 | 993.1  | 909.8  | 825.4  | 754.7  | 472.2  | 262.3 | 217.0 | 202.3 | 190.1 | 177.4 |
| 55°   | 1000.7 | 900.1  | 815.2  | 730.3  | 659.2  | 413.2  | 234.8 | 199.7 | 188.6 | 175.9 | 165.7 |
| 57.5° | 973.8  | 858.9  | 766.4  | 686.1  | 612.9  | 377.1  | 215.0 | 184.0 | 176.4 | 166.7 | 155.5 |
| 60°   | 985.0  | 858.4  | 754.7  | 666.8  | 590.1  | 348.1  | 200.2 | 173.3 | 167.2 | 158.6 | 146.9 |
| 62.5° | 944.8  | 811.2  | 706.5  | 612.9  | 540.3  | 311.6  | 189.6 | 168.2 | 164.2 | 152.5 | 139.3 |
| 65°   | 805.1  | 682.6  | 581.9  | 501.1  | 438.6  | 262.3  | 180.9 | 172.8 | 168.7 | 148.4 | 134.2 |
| 67.5° | 612.9  | 510.8  | 430.0  | 369.5  | 324.3  | 217.0  | 178.9 | 188.1 | 179.9 | 150.4 | 132.7 |
| 70°   | 423.9  | 346.6  | 294.8  | 258.2  | 229.7  | 183.0  | 185.5 | 204.8 | 193.1 | 157.0 | 141.3 |
| 72.5° | 268.9  | 224.6  | 199.2  | 185.5  | 171.8  | 154.5  | 184.0 | 202.8 | 187.0 | 158.1 | 141.3 |
| 75°   | 172.3  | 154.0  | 145.4  | 140.3  | 136.2  | 134.7  | 162.1 | 166.7 | 150.4 | 137.2 | 131.6 |
| 77.5° | 122.0  | 118.9  | 117.4  | 116.9  | 117.4  | 121.0  | 134.2 | 125.5 | 109.3 | 109.8 | 112.8 |
| 80°   | 103.2  | 103.2  | 102.2  | 102.7  | 103.7  | 105.2  | 107.2 | 92.5  | 83.9  | 90.5  | 100.6 |
| 82.5° | 94.5   | 96.1   | 97.1   | 98.1   | 99.6   | 97.6   | 91.0  | 70.1  | 67.6  | 87.9  | 98.6  |
| 85°   | 96.1   | 96.1   | 96.6   | 97.6   | 98.1   | 87.9   | 75.7  | 52.9  | 51.8  | 98.6  | 93.0  |
| 87.5° | 82.3   | 81.3   | 77.8   | 75.2   | 71.7   | 60.5   | 50.3  | 29.5  | 30.5  | 61.0  | 65.1  |
| 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):**

|       | 175°  | 180°  |
|-------|-------|-------|
| 0°    | 808.6 | 808.6 |
| 2.5°  | 804.6 | 804.6 |
| 5°    | 804.6 | 804.6 |
| 7.5°  | 797.9 | 795.9 |
| 10°   | 778.6 | 776.1 |
| 12.5° | 749.2 | 746.6 |
| 15°   | 703.9 | 700.9 |
| 17.5° | 647.5 | 642.4 |
| 20°   | 588.5 | 581.4 |
| 22.5° | 529.6 | 524.0 |
| 25°   | 469.1 | 464.0 |
| 27.5° | 409.6 | 404.6 |
| 30°   | 354.8 | 352.7 |
| 32.5° | 314.1 | 312.1 |
| 35°   | 284.1 | 283.1 |
| 37.5° | 263.8 | 262.8 |
| 40°   | 246.0 | 245.0 |
| 42.5° | 229.7 | 228.2 |
| 45°   | 213.5 | 214.0 |
| 47.5° | 197.2 | 196.7 |
| 50°   | 183.0 | 183.0 |
| 52.5° | 171.3 | 170.8 |
| 55°   | 160.6 | 160.1 |
| 57.5° | 149.9 | 149.4 |
| 60°   | 140.8 | 139.3 |
| 62.5° | 132.1 | 131.1 |
| 65°   | 126.6 | 126.0 |
| 67.5° | 122.5 | 121.0 |
| 70°   | 121.5 | 117.4 |
| 72.5° | 118.4 | 113.3 |
| 75°   | 111.3 | 108.8 |
| 77.5° | 98.1  | 95.0  |
| 80°   | 75.7  | 70.1  |
| 82.5° | 63.5  | 54.9  |
| 85°   | 46.8  | 43.2  |
| 87.5° | 34.1  | 26.9  |
| 90°   | 0.0   | 0.0   |

(END OF REPORT)