

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: LUMARK

Report Number: P303571

Luminaire Tested: **WPLLED15**

Issue Date: 6/24/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303571  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1906-360-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 6/24/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: WPLLED15  
Description: LARGE LED WALL PACK - 50W, 4000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6074.8 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.38' x L: 0.25' x H: 0.68')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U3 - G3

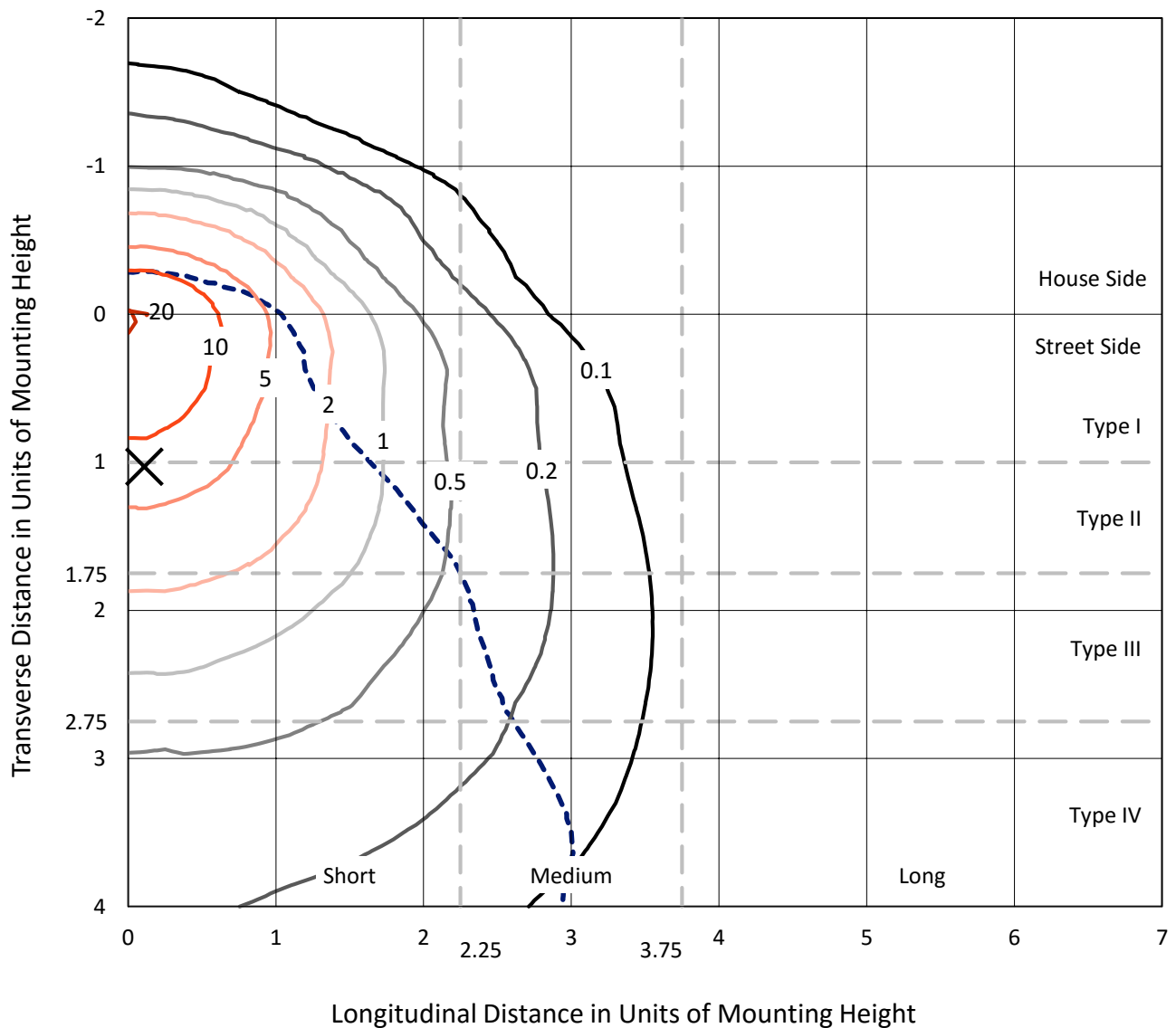
Input Watts (W): 48.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

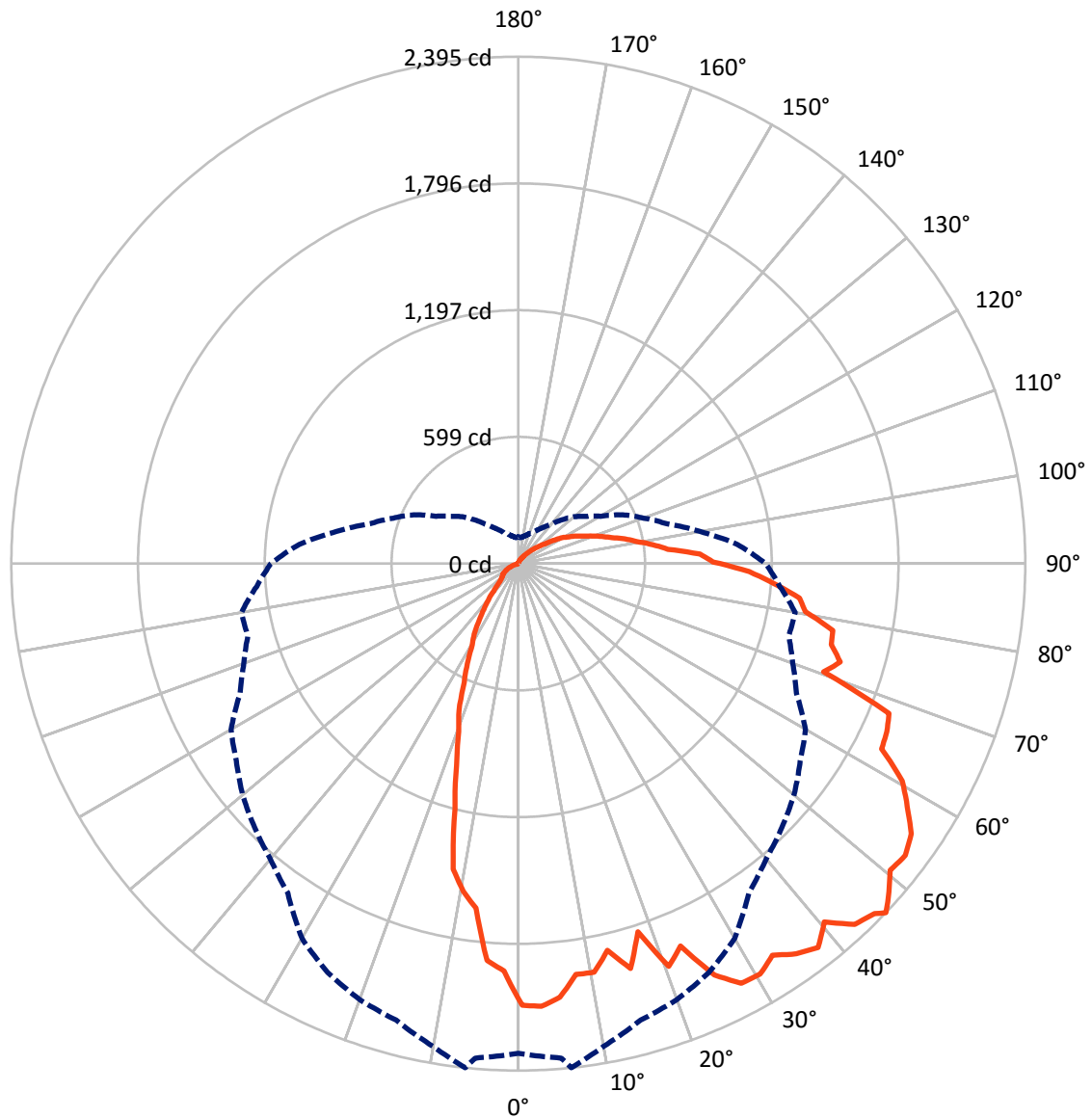
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.9 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 6-Deg Lateral      - - - Horizontal Cone Through 46-Deg Vertical



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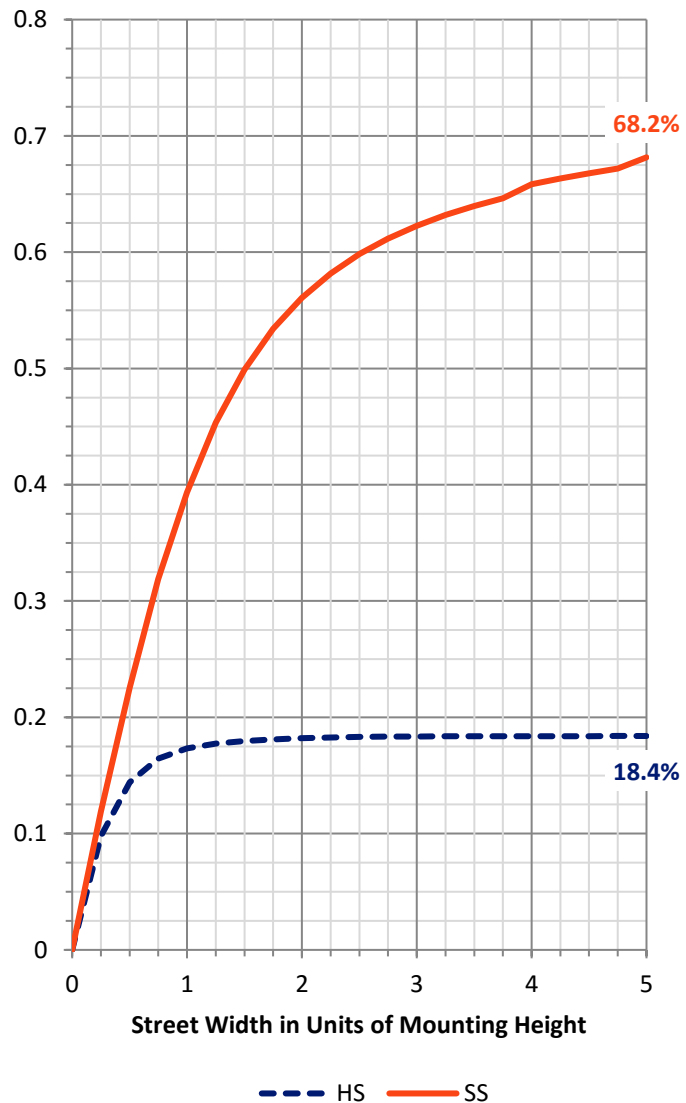
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1128.6   | 7.6    | 1136.2 |
|                    | % Fixture | 18.6     | 0.1    | 18.7   |
| <b>Street Side</b> | Lumens    | 4422.2   | 516.4  | 4938.6 |
|                    | % Fixture | 72.8     | 8.5    | 81.3   |
| <b>Total</b>       | Lumens    | 5550.8   | 524.0  | 6074.8 |
|                    | % Fixture | 91.4     | 8.6    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 185.6  | 3.1       |
| 10°-20°   | 484.1  | 8.0       |
| 20°-30°   | 677.2  | 11.1      |
| 30°-40°   | 806.9  | 13.3      |
| 40°-50°   | 857.3  | 14.1      |
| 50°-60°   | 833.9  | 13.7      |
| 60°-70°   | 733.0  | 12.1      |
| 70°-80°   | 569.4  | 9.4       |
| 80°-90°   | 403.6  | 6.6       |
| 90°-100°  | 236.6  | 3.9       |
| 100°-110° | 137.0  | 2.3       |
| 110°-120° | 80.4   | 1.3       |
| 120°-130° | 41.7   | 0.7       |
| 130°-140° | 18.5   | 0.3       |
| 140°-150° | 7.0    | 0.1       |
| 150°-160° | 2.3    | 0.0       |
| 160°-170° | 0.5    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 5550.8 | 91.4      |
| 0°-180°   | 6074.8 | 100.0     |



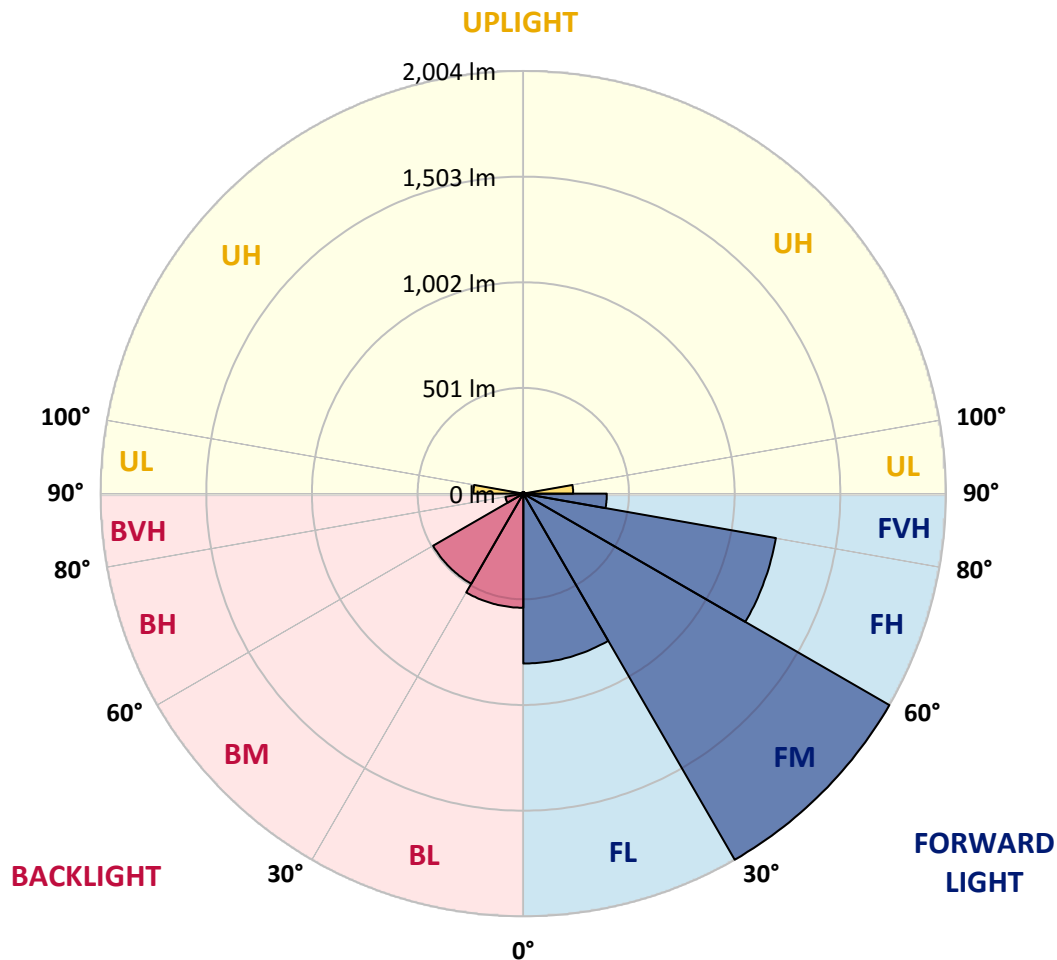
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |        |         |
|------|-------------|--------|-----------|-------------------------|--------|---------|
|      |             |        |           | B                       | U      | G       |
| FL   | (0°-30°)    | 805.7  | 13.3      |                         |        |         |
| FM   | (30°-60°)   | 2004.4 | 33.0      |                         |        |         |
| FH   | (60°-80°)   | 1216.2 | 20.0      |                         |        | G1/1800 |
| FVH  | (80°-90°)   | 395.9  | 6.5       |                         |        | G3/500  |
| BL   | (0°-30°)    | 541.2  | 8.9       | B2/1000                 |        |         |
| BM   | (30°-60°)   | 493.6  | 8.1       | B1/1000                 |        |         |
| BH   | (60°-80°)   | 86.2   | 1.4       | B0/110                  |        | G0/110  |
| BVH  | (80°-90°)   | 7.7    | 0.1       |                         |        | G0/10   |
| UL   | (90°-100°)  | 236.6  | 3.9       |                         | U3/500 |         |
| UH   | (100°-180°) | 7.6    | 0.1       |                         | U1/10  |         |

**BUG Rating: B2-U3-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 6°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 |
| 2.5°   | 2149.4 | 2121.3 | 2093.6 | 2076.2 | 2029.6 | 1984.6 | 2024.6 | 2013.9 | 2032.7 | 2018.9 | 2089.3 |
| 5°     | 2129.4 | 2093.2 | 2057.0 | 2044.3 | 2041.6 | 2067.4 | 2139.8 | 2120.5 | 2129.8 | 2119.4 | 2198.7 |
| 7.5°   | 2037.3 | 1990.7 | 1959.6 | 1965.3 | 1982.3 | 1928.0 | 1953.8 | 1982.3 | 1975.0 | 1923.0 | 2045.8 |
| 10°    | 2023.5 | 1985.0 | 1963.4 | 2003.8 | 1959.9 | 1944.2 | 2010.8 | 1937.2 | 1967.3 | 1930.7 | 1970.7 |
| 12.5°  | 1915.7 | 1881.4 | 1874.1 | 1894.1 | 1838.6 | 1860.6 | 1874.5 | 1905.6 | 1905.3 | 1986.1 | 1991.1 |
| 15°    | 1995.4 | 1964.2 | 1984.6 | 1970.7 | 1962.3 | 1915.7 | 1924.1 | 1833.6 | 1827.9 | 1855.2 | 1922.6 |
| 17.5°  | 1847.5 | 1826.7 | 1827.9 | 1780.1 | 1753.9 | 1753.6 | 1817.9 | 1885.2 | 1963.8 | 1845.2 | 1844.4 |
| 20°    | 2011.9 | 2020.8 | 2030.4 | 2008.8 | 1962.3 | 1895.6 | 1872.5 | 1777.0 | 1753.6 | 1834.0 | 1976.9 |
| 22.5°  | 1966.9 | 1970.3 | 1962.3 | 1926.1 | 1856.4 | 1849.0 | 1923.4 | 1966.9 | 1872.9 | 1728.1 | 1795.9 |
| 25°    | 2131.7 | 2136.7 | 2152.9 | 2133.6 | 2072.8 | 2014.6 | 1950.3 | 1852.9 | 1852.5 | 1916.8 | 1799.8 |
| 27.5°  | 2238.0 | 2216.4 | 2244.5 | 2162.9 | 2068.5 | 2016.2 | 2053.1 | 2041.2 | 1889.9 | 1794.0 | 1900.3 |
| 30°    | 2214.5 | 2219.9 | 2250.7 | 2221.8 | 2189.4 | 2163.3 | 2134.4 | 2023.1 | 1976.5 | 1924.5 | 1794.8 |
| 32.5°  | 2162.5 | 2171.7 | 2204.8 | 2158.6 | 2122.4 | 2091.2 | 2116.3 | 2102.0 | 2011.5 | 1920.7 | 1908.7 |
| 35°    | 2220.6 | 2227.6 | 2263.8 | 2203.7 | 2134.0 | 2080.9 | 2082.4 | 2051.6 | 1978.0 | 1958.4 | 1887.9 |
| 37.5°  | 2224.9 | 2242.6 | 2300.3 | 2248.7 | 2194.4 | 2147.5 | 2103.2 | 2029.3 | 1954.9 | 1907.2 | 1903.0 |
| 40°    | 2154.0 | 2174.4 | 2226.0 | 2158.2 | 2093.6 | 2086.2 | 2100.5 | 2048.1 | 1929.5 | 1886.4 | 1844.0 |
| 42.5°  | 2261.1 | 2278.4 | 2329.6 | 2228.7 | 2124.4 | 2074.3 | 2065.4 | 2021.6 | 1910.3 | 1853.7 | 1804.0 |
| 45°    | 2290.3 | 2316.5 | 2358.9 | 2273.0 | 2202.5 | 2156.3 | 2114.7 | 2010.0 | 1897.2 | 1832.9 | 1775.5 |
| 46°    | 2312.7 | 2344.6 | 2394.7 | 2315.7 | 2232.2 | 2191.0 | 2130.5 | 2043.9 | 1898.7 | 1821.7 | 1761.3 |
| 47.5°  | 2270.3 | 2304.6 | 2352.7 | 2293.4 | 2241.4 | 2207.9 | 2180.6 | 2078.2 | 1931.1 | 1819.0 | 1732.8 |
| 50°    | 2201.0 | 2226.0 | 2276.5 | 2223.7 | 2164.4 | 2154.4 | 2164.0 | 2117.8 | 1965.3 | 1855.2 | 1712.0 |
| 52.5°  | 2211.8 | 2235.6 | 2289.9 | 2250.3 | 2191.7 | 2169.0 | 2125.9 | 2052.0 | 1937.6 | 1867.9 | 1725.8 |
| 55°    | 2211.0 | 2211.8 | 2252.6 | 2164.0 | 2031.2 | 2031.6 | 2069.3 | 2050.8 | 1933.0 | 1846.7 | 1699.6 |
| 57.5°  | 2083.5 | 2098.9 | 2166.7 | 2147.9 | 2071.2 | 2055.8 | 2056.2 | 2009.2 | 1896.4 | 1815.5 | 1675.0 |
| 60°    | 2028.1 | 2020.4 | 2084.3 | 2058.9 | 1981.1 | 1989.6 | 1980.0 | 1898.3 | 1807.5 | 1784.4 | 1651.9 |
| 62.5°  | 1870.2 | 1861.8 | 1926.4 | 1919.1 | 1889.5 | 1898.7 | 1908.3 | 1916.4 | 1809.0 | 1707.7 | 1577.6 |
| 65°    | 1863.3 | 1849.8 | 1913.7 | 1872.1 | 1798.6 | 1781.7 | 1782.4 | 1751.2 | 1698.9 | 1681.9 | 1534.5 |
| 67.5°  | 1830.6 | 1831.3 | 1888.3 | 1872.5 | 1802.5 | 1770.9 | 1739.7 | 1695.8 | 1614.5 | 1569.1 | 1464.0 |
| 70°    | 1489.8 | 1475.2 | 1530.2 | 1547.5 | 1589.9 | 1661.5 | 1627.6 | 1568.7 | 1528.3 | 1491.7 | 1385.1 |
| 72.5°  | 1558.3 | 1539.8 | 1590.3 | 1599.5 | 1628.4 | 1632.6 | 1641.5 | 1679.6 | 1500.2 | 1360.8 | 1238.3 |
| 75°    | 1495.9 | 1489.4 | 1526.8 | 1491.3 | 1425.1 | 1418.2 | 1410.5 | 1402.8 | 1342.3 | 1279.2 | 1128.6 |
| 77.5°  | 1496.3 | 1484.4 | 1518.7 | 1472.8 | 1400.5 | 1375.0 | 1333.8 | 1271.1 | 1204.5 | 1194.4 | 1103.6 |
| 80°    | 1342.3 | 1350.8 | 1374.7 | 1374.3 | 1378.1 | 1415.1 | 1360.8 | 1261.1 | 1153.6 | 1082.0 | 995.4  |
| 82.5°  | 1329.6 | 1320.0 | 1338.1 | 1315.4 | 1273.0 | 1250.3 | 1189.8 | 1179.4 | 1126.3 | 1023.9 | 882.6  |
| 85°    | 1205.2 | 1200.2 | 1213.7 | 1208.7 | 1187.5 | 1212.5 | 1169.8 | 1081.6 | 996.5  | 921.8  | 808.2  |
| 87.5°  | 1082.4 | 1080.5 | 1091.6 | 1064.7 | 1033.5 | 1015.4 | 971.9  | 948.8  | 904.9  | 834.0  | 722.4  |
| 90°    | 917.6  | 913.4  | 919.1  | 902.6  | 881.4  | 874.1  | 862.5  | 849.8  | 777.8  | 705.8  | 616.9  |
| 92.5°  | 860.6  | 877.5  | 858.7  | 857.5  | 838.7  | 821.7  | 775.1  | 702.7  | 642.7  | 592.2  | 534.8  |
| 95°    | 708.1  | 708.1  | 709.3  | 701.2  | 685.4  | 673.1  | 651.9  | 616.1  | 569.9  | 536.0  | 474.0  |
| 97.5°  | 645.0  | 645.4  | 641.5  | 635.3  | 616.9  | 601.8  | 581.4  | 552.2  | 515.2  | 472.5  | 404.7  |
| 100°   | 571.4  | 573.4  | 570.7  | 573.7  | 561.8  | 557.2  | 536.0  | 497.5  | 450.9  | 403.2  | 343.1  |
| 102.5° | 522.9  | 521.0  | 517.5  | 512.9  | 497.9  | 481.3  | 459.8  | 431.3  | 397.0  | 352.7  | 294.6  |
| 105°   | 463.6  | 465.9  | 458.2  | 458.2  | 447.8  | 435.9  | 417.4  | 387.0  | 349.2  | 304.2  | 258.0  |
| 107.5° | 422.4  | 421.6  | 414.3  | 412.4  | 403.9  | 387.4  | 370.8  | 339.6  | 305.7  | 268.8  | 224.1  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 6°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110°   | 378.9 | 380.8 | 373.1 | 372.4 | 361.6 | 346.6 | 328.8 | 299.6 | 267.6 | 233.3 | 196.4 |
| 112.5° | 338.9 | 340.0 | 331.9 | 331.5 | 322.3 | 308.0 | 294.6 | 267.6 | 239.9 | 208.3 | 176.7 |
| 115°   | 309.6 | 311.1 | 302.3 | 302.3 | 293.4 | 277.6 | 263.0 | 234.5 | 208.3 | 180.2 | 152.9 |
| 117.5° | 276.9 | 275.3 | 268.4 | 268.8 | 259.5 | 243.4 | 231.8 | 206.8 | 182.1 | 157.5 | 134.0 |
| 120°   | 249.1 | 249.9 | 241.8 | 241.0 | 230.6 | 216.4 | 202.5 | 181.7 | 161.3 | 140.2 | 118.6 |
| 122.5° | 212.6 | 212.6 | 204.9 | 204.9 | 195.6 | 182.1 | 170.6 | 149.8 | 134.4 | 117.8 | 100.9 |
| 125°   | 174.8 | 175.6 | 167.9 | 168.3 | 160.2 | 149.0 | 142.5 | 127.8 | 115.5 | 101.7 | 88.2  |
| 127.5° | 149.0 | 150.6 | 144.4 | 145.6 | 139.4 | 129.8 | 124.4 | 110.5 | 100.5 | 86.6  | 75.1  |
| 130°   | 126.7 | 127.1 | 122.8 | 122.8 | 117.8 | 110.5 | 105.9 | 95.1  | 85.9  | 75.1  | 63.5  |
| 132.5° | 109.0 | 109.0 | 104.4 | 104.7 | 99.7  | 92.8  | 89.3  | 79.7  | 72.0  | 62.8  | 54.7  |
| 135°   | 90.9  | 90.9  | 87.4  | 87.4  | 82.8  | 76.6  | 73.9  | 66.2  | 59.7  | 53.1  | 45.4  |
| 137.5° | 73.9  | 74.3  | 70.9  | 71.2  | 68.2  | 63.5  | 61.6  | 55.1  | 50.1  | 43.5  | 37.4  |
| 140°   | 61.2  | 60.5  | 58.5  | 58.5  | 55.8  | 52.0  | 51.2  | 45.8  | 41.6  | 35.8  | 31.2  |
| 142.5° | 50.1  | 50.1  | 48.1  | 48.9  | 46.2  | 42.7  | 42.0  | 37.7  | 33.9  | 30.0  | 25.8  |
| 145°   | 40.8  | 40.8  | 39.7  | 39.7  | 37.7  | 34.7  | 34.3  | 30.8  | 28.1  | 24.3  | 21.6  |
| 147.5° | 33.5  | 33.5  | 32.3  | 32.7  | 30.8  | 28.9  | 28.1  | 25.0  | 22.7  | 20.0  | 17.7  |
| 150°   | 28.1  | 27.3  | 26.6  | 26.6  | 25.0  | 23.1  | 23.1  | 20.4  | 18.9  | 16.6  | 14.2  |
| 152.5° | 22.7  | 22.3  | 21.9  | 21.9  | 20.4  | 19.3  | 18.5  | 16.9  | 15.4  | 13.1  | 11.2  |
| 155°   | 18.1  | 18.1  | 17.7  | 17.3  | 16.6  | 15.0  | 14.6  | 13.1  | 11.6  | 10.0  | 8.1   |
| 157.5° | 14.2  | 14.2  | 13.9  | 13.9  | 12.7  | 11.6  | 11.6  | 10.0  | 8.5   | 6.9   | 5.8   |
| 160°   | 11.2  | 10.8  | 10.4  | 10.4  | 9.6   | 8.5   | 8.1   | 6.9   | 5.8   | 4.6   | 3.5   |
| 162.5° | 8.1   | 7.7   | 7.7   | 7.3   | 6.5   | 5.8   | 5.4   | 4.2   | 3.5   | 2.7   | 2.3   |
| 165°   | 4.6   | 4.6   | 4.6   | 4.2   | 3.9   | 3.1   | 3.1   | 2.3   | 1.5   | 1.5   | 1.9   |
| 167.5° | 1.9   | 1.9   | 1.9   | 1.5   | 1.2   | 1.2   | 1.5   | 1.5   | 1.5   | 1.5   | 1.9   |
| 170°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 172.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 175°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 177.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180°   | 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):**

|        | 50°    | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    | 100°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 |
| 2.5°   | 2038.5 | 2037.3 | 2001.1 | 1981.1 | 1987.7 | 1998.4 | 2003.8 | 2017.3 | 2048.9 | 2087.0 | 2088.6 |
| 5°     | 2142.5 | 2124.7 | 2063.9 | 2014.2 | 1980.4 | 1953.8 | 1956.1 | 1978.4 | 2034.6 | 2094.3 | 2053.9 |
| 7.5°   | 2101.6 | 2182.5 | 2144.4 | 2052.4 | 2019.6 | 1988.8 | 1968.8 | 1978.8 | 2058.5 | 2107.8 | 1990.0 |
| 10°    | 1986.5 | 1993.1 | 2030.4 | 2104.3 | 2089.7 | 2046.2 | 1992.7 | 1963.8 | 2069.7 | 2082.0 | 1951.9 |
| 12.5°  | 1953.8 | 1954.9 | 1914.9 | 1983.8 | 2151.3 | 2052.7 | 1978.4 | 1908.7 | 2042.0 | 1985.0 | 1854.4 |
| 15°    | 1986.1 | 1956.9 | 1891.0 | 1902.6 | 2013.1 | 2085.9 | 1965.7 | 1881.4 | 2025.8 | 1923.7 | 1772.4 |
| 17.5°  | 1857.1 | 1933.8 | 1920.7 | 1871.4 | 1896.0 | 2068.9 | 1950.7 | 1857.1 | 2007.3 | 1852.9 | 1739.7 |
| 20°    | 1802.1 | 1811.7 | 1887.9 | 1866.0 | 1830.6 | 1964.2 | 1955.3 | 1818.6 | 1960.7 | 1768.2 | 1732.8 |
| 22.5°  | 1912.2 | 1789.0 | 1754.3 | 1891.8 | 1787.4 | 1860.6 | 1957.6 | 1768.2 | 1895.6 | 1702.7 | 1713.1 |
| 25°    | 1726.6 | 1861.0 | 1700.8 | 1745.5 | 1820.9 | 1779.7 | 1929.5 | 1723.9 | 1829.0 | 1653.1 | 1609.2 |
| 27.5°  | 1767.0 | 1689.6 | 1790.5 | 1629.9 | 1819.4 | 1702.7 | 1877.5 | 1679.6 | 1752.0 | 1620.3 | 1504.4 |
| 30°    | 1839.4 | 1680.4 | 1713.9 | 1643.0 | 1711.6 | 1677.7 | 1809.8 | 1628.8 | 1657.3 | 1568.3 | 1419.7 |
| 32.5°  | 1750.1 | 1777.0 | 1608.8 | 1676.5 | 1593.0 | 1663.1 | 1732.0 | 1581.8 | 1582.2 | 1497.1 | 1356.6 |
| 35°    | 1837.9 | 1707.0 | 1668.5 | 1625.3 | 1552.2 | 1620.7 | 1685.0 | 1552.9 | 1521.7 | 1439.7 | 1309.6 |
| 37.5°  | 1825.2 | 1731.2 | 1705.8 | 1557.2 | 1557.9 | 1583.0 | 1624.2 | 1510.6 | 1474.8 | 1369.6 | 1236.8 |
| 40°    | 1830.6 | 1736.2 | 1648.4 | 1551.4 | 1524.4 | 1512.5 | 1557.9 | 1449.0 | 1403.1 | 1295.3 | 1145.5 |
| 42.5°  | 1782.0 | 1724.7 | 1624.9 | 1536.4 | 1475.2 | 1442.4 | 1473.2 | 1373.5 | 1319.6 | 1199.5 | 1035.8 |
| 45°    | 1721.2 | 1664.6 | 1587.2 | 1473.2 | 1407.4 | 1353.5 | 1370.0 | 1281.5 | 1214.1 | 1083.9 | 920.3  |
| 46°    | 1700.0 | 1625.7 | 1566.4 | 1449.4 | 1379.7 | 1322.3 | 1327.7 | 1240.7 | 1168.3 | 1038.9 | 872.5  |
| 47.5°  | 1656.5 | 1575.7 | 1519.4 | 1405.5 | 1332.7 | 1279.5 | 1281.1 | 1181.7 | 1111.7 | 968.4  | 812.1  |
| 50°    | 1628.0 | 1511.7 | 1429.3 | 1341.9 | 1249.5 | 1193.3 | 1186.0 | 1080.9 | 1000.8 | 856.0  | 705.8  |
| 52.5°  | 1596.1 | 1457.8 | 1375.8 | 1271.1 | 1164.4 | 1104.7 | 1095.1 | 998.5  | 914.5  | 768.2  | 612.6  |
| 55°    | 1563.3 | 1428.9 | 1291.1 | 1192.1 | 1093.6 | 1031.2 | 1011.5 | 917.2  | 831.0  | 673.1  | 524.1  |
| 57.5°  | 1541.4 | 1372.7 | 1235.6 | 1127.4 | 1025.0 | 956.1  | 945.3  | 854.1  | 752.4  | 596.1  | 445.1  |
| 60°    | 1508.3 | 1331.5 | 1178.7 | 1054.3 | 954.6  | 874.9  | 856.0  | 762.0  | 649.2  | 477.1  | 365.0  |
| 62.5°  | 1443.6 | 1282.6 | 1128.2 | 978.4  | 874.5  | 805.5  | 780.1  | 680.0  | 546.0  | 394.7  | 301.1  |
| 65°    | 1395.8 | 1244.1 | 1071.2 | 905.3  | 794.4  | 734.3  | 713.5  | 612.2  | 460.9  | 316.1  | 255.7  |
| 67.5°  | 1326.1 | 1164.0 | 1033.1 | 851.7  | 721.2  | 662.3  | 634.2  | 527.5  | 377.4  | 254.9  | 221.8  |
| 70°    | 1280.7 | 1106.3 | 940.7  | 795.1  | 650.7  | 584.1  | 541.0  | 429.3  | 290.3  | 213.3  | 192.9  |
| 72.5°  | 1129.8 | 1007.3 | 858.7  | 715.8  | 584.5  | 501.3  | 449.4  | 336.5  | 219.1  | 175.2  | 166.7  |
| 75°    | 1052.4 | 928.8  | 786.7  | 653.8  | 527.5  | 427.0  | 362.7  | 252.2  | 170.2  | 144.8  | 140.9  |
| 77.5°  | 974.6  | 844.8  | 715.8  | 589.1  | 458.6  | 360.0  | 283.8  | 189.1  | 130.9  | 118.6  | 112.4  |
| 80°    | 911.0  | 770.9  | 631.1  | 514.8  | 402.0  | 294.2  | 220.6  | 139.4  | 99.7   | 94.0   | 87.4   |
| 82.5°  | 787.8  | 679.2  | 556.8  | 439.4  | 335.4  | 241.4  | 168.7  | 104.7  | 76.6   | 72.0   | 65.5   |
| 85°    | 705.0  | 588.0  | 469.4  | 372.7  | 274.2  | 192.9  | 129.4  | 78.2   | 57.0   | 53.5   | 47.0   |
| 87.5°  | 615.7  | 511.0  | 403.2  | 305.7  | 228.7  | 154.4  | 100.1  | 59.3   | 42.0   | 39.3   | 34.7   |
| 90°    | 534.5  | 441.7  | 350.0  | 257.6  | 186.0  | 129.0  | 78.2   | 44.3   | 32.3   | 29.6   | 27.3   |
| 92.5°  | 471.3  | 386.6  | 301.9  | 218.7  | 159.8  | 105.9  | 63.5   | 35.0   | 26.6   | 23.9   | 21.9   |
| 95°    | 406.2  | 343.1  | 263.8  | 190.2  | 135.5  | 88.2   | 52.0   | 28.9   | 22.7   | 20.4   | 18.9   |
| 97.5°  | 345.8  | 289.6  | 225.6  | 160.6  | 112.8  | 72.0   | 43.5   | 25.4   | 20.8   | 19.3   | 16.6   |
| 100°   | 291.1  | 238.4  | 184.8  | 134.4  | 92.8   | 60.1   | 37.0   | 23.5   | 20.4   | 18.5   | 15.4   |
| 102.5° | 243.7  | 199.8  | 151.7  | 107.4  | 76.6   | 50.4   | 32.3   | 21.9   | 20.4   | 17.7   | 13.9   |
| 105°   | 214.1  | 170.6  | 128.6  | 88.9   | 63.9   | 43.1   | 28.9   | 21.2   | 20.4   | 17.3   | 12.7   |
| 107.5° | 185.6  | 149.8  | 110.9  | 77.0   | 55.8   | 38.1   | 26.6   | 20.4   | 19.6   | 16.6   | 11.6   |



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**CANDELA DISTRIBUTION (continued):**

|        | 50°   | 55°   | 60°  | 65°  | 70°  | 75°  | 80°  | 85°  | 90°  | 95°  | 100° |
|--------|-------|-------|------|------|------|------|------|------|------|------|------|
| 110°   | 162.5 | 129.8 | 97.4 | 68.9 | 50.4 | 34.3 | 24.6 | 20.0 | 19.3 | 15.8 | 10.8 |
| 112.5° | 144.8 | 113.2 | 85.5 | 62.0 | 45.4 | 30.4 | 23.1 | 19.3 | 18.1 | 14.6 | 9.6  |
| 115°   | 125.9 | 99.7  | 75.5 | 55.4 | 40.8 | 26.6 | 21.6 | 18.1 | 16.9 | 13.5 | 8.9  |
| 117.5° | 111.3 | 88.2  | 67.8 | 49.3 | 35.0 | 23.5 | 19.6 | 16.9 | 15.4 | 12.3 | 8.1  |
| 120°   | 97.0  | 75.5  | 58.5 | 42.4 | 28.9 | 20.8 | 17.3 | 15.0 | 13.5 | 10.8 | 6.9  |
| 122.5° | 83.6  | 66.2  | 52.0 | 37.0 | 24.6 | 18.5 | 15.0 | 13.5 | 12.3 | 9.6  | 6.2  |
| 125°   | 73.9  | 58.5  | 45.8 | 30.8 | 21.6 | 16.2 | 13.1 | 11.9 | 10.8 | 8.5  | 5.4  |
| 127.5° | 62.4  | 50.1  | 38.1 | 26.2 | 18.1 | 13.9 | 11.2 | 10.4 | 9.2  | 7.3  | 4.6  |
| 130°   | 53.1  | 42.0  | 31.6 | 21.9 | 16.2 | 11.9 | 9.6  | 8.5  | 7.7  | 6.2  | 3.9  |
| 132.5° | 45.8  | 35.8  | 27.0 | 18.9 | 13.9 | 9.6  | 7.7  | 6.9  | 6.2  | 5.0  | 3.1  |
| 135°   | 37.7  | 30.4  | 23.1 | 16.2 | 11.6 | 7.7  | 6.2  | 5.8  | 5.0  | 3.9  | 2.7  |
| 137.5° | 31.6  | 25.0  | 19.3 | 13.9 | 9.6  | 6.2  | 5.0  | 4.6  | 3.9  | 3.1  | 2.3  |
| 140°   | 26.2  | 20.4  | 16.2 | 11.2 | 7.3  | 4.2  | 4.2  | 3.5  | 3.1  | 2.7  | 1.9  |
| 142.5° | 21.9  | 16.9  | 13.5 | 9.2  | 5.8  | 3.5  | 3.5  | 2.7  | 2.7  | 2.3  | 1.9  |
| 145°   | 18.1  | 14.2  | 11.2 | 6.9  | 3.9  | 2.7  | 3.1  | 2.7  | 2.3  | 2.3  | 1.9  |
| 147.5° | 14.6  | 11.2  | 8.5  | 5.0  | 2.7  | 2.7  | 2.7  | 2.3  | 2.3  | 1.9  | 1.5  |
| 150°   | 11.6  | 8.5   | 6.2  | 3.5  | 2.3  | 2.3  | 2.3  | 1.9  | 1.9  | 1.9  | 1.5  |
| 152.5° | 8.9   | 6.2   | 3.9  | 2.3  | 2.3  | 2.3  | 2.3  | 1.9  | 1.9  | 1.5  | 1.2  |
| 155°   | 6.2   | 4.2   | 2.7  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.5  | 1.5  | 1.2  |
| 157.5° | 4.2   | 2.7   | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.5  | 1.5  | 1.5  | 1.2  |
| 160°   | 2.7   | 1.9   | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.5  | 1.5  | 1.5  | 1.2  |
| 162.5° | 1.9   | 1.9   | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.5  | 1.5  | 1.5  | 1.2  |
| 165°   | 1.9   | 1.9   | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.5  | 1.5  | 1.5  |
| 167.5° | 1.9   | 1.9   | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.5  | 1.5  | 1.2  |
| 170°   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 172.5° | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 175°   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 177.5° | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 180°   | 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):**

|        | 105°   | 110°   | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   | 150°   | 155°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 | 2086.2 |
| 2.5°   | 2159.4 | 2102.4 | 2078.2 | 2043.1 | 2104.7 | 2020.4 | 2009.6 | 2007.3 | 1987.7 | 1970.3 | 1931.4 |
| 5°     | 2055.8 | 1972.6 | 1944.9 | 1894.9 | 1939.5 | 1842.1 | 1814.8 | 1809.8 | 1829.0 | 1873.3 | 1902.6 |
| 7.5°   | 1985.0 | 1876.4 | 1803.2 | 1786.3 | 1913.7 | 1884.9 | 1813.6 | 1774.3 | 1757.4 | 1728.1 | 1658.8 |
| 10°    | 1909.5 | 1801.7 | 1827.9 | 1817.1 | 1815.9 | 1687.3 | 1613.8 | 1676.2 | 1727.0 | 1720.1 | 1689.6 |
| 12.5°  | 1830.6 | 1866.4 | 1779.4 | 1637.3 | 1655.0 | 1699.3 | 1654.2 | 1621.5 | 1503.6 | 1460.1 | 1408.2 |
| 15°    | 1825.6 | 1779.4 | 1626.1 | 1610.3 | 1688.9 | 1556.0 | 1426.6 | 1434.0 | 1461.7 | 1449.4 | 1353.1 |
| 17.5°  | 1813.6 | 1625.7 | 1607.6 | 1577.6 | 1484.0 | 1400.5 | 1421.6 | 1321.5 | 1238.0 | 1200.6 | 1156.3 |
| 20°    | 1673.5 | 1571.0 | 1558.7 | 1402.0 | 1420.1 | 1333.1 | 1214.5 | 1169.4 | 1095.9 | 991.5  | 944.5  |
| 22.5°  | 1561.0 | 1557.6 | 1403.5 | 1335.4 | 1290.7 | 1169.0 | 1085.1 | 954.2  | 923.8  | 874.9  | 817.1  |
| 25°    | 1512.5 | 1428.9 | 1316.5 | 1226.8 | 1145.9 | 1017.3 | 886.0  | 879.1  | 795.1  | 735.5  | 740.9  |
| 27.5°  | 1464.0 | 1319.2 | 1238.0 | 1087.0 | 1006.5 | 850.6  | 833.3  | 732.8  | 727.0  | 666.9  | 599.5  |
| 30°    | 1346.9 | 1236.4 | 1104.7 | 973.8  | 848.3  | 810.5  | 696.6  | 694.6  | 599.5  | 582.2  | 522.5  |
| 32.5°  | 1225.6 | 1152.9 | 983.1  | 835.6  | 809.8  | 686.2  | 655.4  | 569.1  | 530.6  | 487.5  | 447.1  |
| 35°    | 1142.9 | 1033.1 | 884.1  | 754.3  | 702.0  | 639.6  | 552.2  | 500.2  | 457.8  | 417.0  | 398.5  |
| 37.5°  | 1075.9 | 938.4  | 783.2  | 708.9  | 624.6  | 547.2  | 483.2  | 435.9  | 390.4  | 370.4  | 333.5  |
| 40°    | 983.1  | 852.9  | 722.4  | 634.2  | 568.0  | 485.6  | 423.2  | 375.4  | 340.4  | 311.5  | 273.4  |
| 42.5°  | 881.8  | 755.1  | 647.3  | 555.6  | 479.4  | 411.6  | 363.5  | 321.1  | 284.2  | 247.2  | 223.3  |
| 45°    | 767.0  | 665.4  | 584.1  | 487.5  | 414.7  | 363.9  | 317.7  | 268.0  | 224.1  | 204.1  | 176.4  |
| 46°    | 726.2  | 628.8  | 544.9  | 447.4  | 389.3  | 344.2  | 293.4  | 244.5  | 209.1  | 184.4  | 161.3  |
| 47.5°  | 662.3  | 571.0  | 501.0  | 398.5  | 361.2  | 316.5  | 262.2  | 214.5  | 182.9  | 159.8  | 141.3  |
| 50°    | 572.2  | 497.5  | 417.0  | 352.7  | 312.3  | 269.2  | 213.7  | 175.2  | 147.9  | 132.8  | 119.0  |
| 52.5°  | 487.1  | 422.8  | 356.6  | 301.1  | 265.7  | 214.1  | 174.8  | 143.2  | 124.0  | 112.8  | 104.0  |
| 55°    | 414.3  | 359.3  | 305.4  | 261.5  | 215.2  | 176.4  | 144.4  | 119.4  | 106.3  | 98.2   | 91.6   |
| 57.5°  | 354.6  | 311.1  | 267.6  | 224.9  | 176.4  | 145.6  | 119.0  | 101.3  | 90.5   | 85.1   | 80.5   |
| 60°    | 298.0  | 272.2  | 233.0  | 181.0  | 143.2  | 119.4  | 97.0   | 85.5   | 78.2   | 72.8   | 70.5   |
| 62.5°  | 251.4  | 236.8  | 196.4  | 147.9  | 117.1  | 97.0   | 78.6   | 70.9   | 65.5   | 61.2   | 60.5   |
| 65°    | 218.3  | 203.7  | 160.6  | 120.5  | 95.1   | 77.0   | 63.5   | 57.8   | 53.5   | 51.2   | 49.7   |
| 67.5°  | 192.1  | 170.6  | 131.3  | 97.8   | 75.5   | 59.3   | 50.1   | 44.7   | 41.2   | 40.0   | 38.5   |
| 70°    | 167.9  | 141.7  | 108.2  | 77.8   | 58.5   | 45.8   | 38.5   | 33.5   | 30.8   | 28.1   | 27.7   |
| 72.5°  | 142.1  | 115.1  | 86.3   | 62.8   | 45.4   | 35.4   | 27.3   | 22.7   | 20.0   | 17.7   | 16.9   |
| 75°    | 115.5  | 91.3   | 66.6   | 48.1   | 33.5   | 25.0   | 16.9   | 11.9   | 8.1    | 1.9    | 0.4    |
| 77.5°  | 90.5   | 71.2   | 50.1   | 35.0   | 22.3   | 14.2   | 6.5    | 0.8    | 0.0    | 0.0    | 0.0    |
| 80°    | 68.2   | 52.8   | 37.4   | 24.3   | 13.5   | 6.2    | 1.5    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5°  | 51.2   | 38.5   | 26.2   | 16.9   | 9.2    | 4.2    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°    | 37.7   | 28.5   | 19.3   | 12.3   | 6.5    | 2.7    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5°  | 27.3   | 21.2   | 14.6   | 9.2    | 4.6    | 1.9    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°    | 21.6   | 16.9   | 11.6   | 7.3    | 3.9    | 1.5    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 92.5°  | 18.1   | 13.9   | 9.6    | 6.5    | 3.1    | 1.5    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 95°    | 15.8   | 11.9   | 8.1    | 5.0    | 2.7    | 1.5    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 97.5°  | 13.1   | 10.0   | 6.9    | 4.2    | 1.9    | 1.2    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 100°   | 11.6   | 8.5    | 5.8    | 3.5    | 1.5    | 0.8    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 102.5° | 10.4   | 7.7    | 5.0    | 2.7    | 1.2    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 105°   | 8.9    | 6.5    | 4.2    | 2.3    | 1.2    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 107.5° | 8.1    | 5.8    | 3.5    | 1.9    | 1.2    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

|        | 105° | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° |        |
|--------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 110°   | 7.3  | 5.0  | 3.1  | 1.5  | 0.8  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0°     |
| 112.5° | 6.5  | 4.2  | 2.3  | 1.5  | 0.8  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.5°   |
| 115°   | 5.8  | 3.5  | 1.9  | 1.2  | 0.8  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 5°     |
| 117.5° | 5.4  | 3.1  | 1.9  | 1.2  | 0.8  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 7.5°   |
| 120°   | 4.6  | 2.7  | 1.5  | 1.2  | 0.8  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 10°    |
| 122.5° | 3.9  | 2.3  | 1.5  | 1.2  | 0.8  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 12.5°  |
| 125°   | 3.5  | 1.9  | 1.5  | 1.2  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 15°    |
| 127.5° | 2.7  | 1.9  | 1.5  | 1.2  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 17.5°  |
| 130°   | 2.3  | 1.9  | 1.2  | 0.8  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 20°    |
| 132.5° | 2.3  | 1.5  | 1.2  | 0.8  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 22.5°  |
| 135°   | 1.9  | 1.5  | 1.2  | 0.8  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 25°    |
| 137.5° | 1.9  | 1.5  | 1.2  | 0.8  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 27.5°  |
| 140°   | 1.9  | 1.5  | 1.2  | 0.8  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 30°    |
| 142.5° | 1.5  | 1.2  | 1.2  | 0.8  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 32.5°  |
| 145°   | 1.5  | 1.2  | 0.8  | 0.8  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 35°    |
| 147.5° | 1.5  | 1.2  | 0.8  | 0.8  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 37.5°  |
| 150°   | 1.2  | 1.2  | 0.8  | 0.8  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 40°    |
| 152.5° | 1.2  | 0.8  | 0.8  | 0.8  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 42.5°  |
| 155°   | 1.2  | 1.2  | 0.8  | 0.8  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 45°    |
| 157.5° | 1.2  | 0.8  | 0.8  | 0.8  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 46°    |
| 160°   | 1.2  | 1.2  | 0.8  | 0.8  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 0.0  | 47.5°  |
| 162.5° | 1.2  | 1.2  | 1.2  | 0.8  | 0.4  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 50°    |
| 165°   | 1.5  | 1.2  | 1.2  | 0.8  | 0.8  | 0.4  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 52.5°  |
| 167.5° | 1.2  | 1.2  | 1.2  | 0.8  | 0.4  | 0.4  | 0.4  | 0.4  | 0.0  | 0.0  | 0.0  | 55°    |
| 170°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 57.5°  |
| 172.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 60°    |
| 175°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 62.5°  |
| 177.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 65°    |
| 180°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 67.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 70°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 72.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 75°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 77.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 80°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 82.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 85°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 87.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 90°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 92.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 95°    |
|        |      |      |      |      |      |      |      |      |      |      |      | 97.5°  |
|        |      |      |      |      |      |      |      |      |      |      |      | 100°   |
|        |      |      |      |      |      |      |      |      |      |      |      | 102.5° |
|        |      |      |      |      |      |      |      |      |      |      |      | 105°   |
|        |      |      |      |      |      |      |      |      |      |      |      | 107.5° |



