

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: P157983

Luminaire Tested: **VST-F02-LED-E-U-RW-8030**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P157983  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33711)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VST-F02-LED-E-U-RW-8030  
Description: VENTUS LED SITE/ROADWAY 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: 4341.2 lumens  
Efficiency: N/A  
Efficacy: 78.9 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type I - Medium - Full Cutoff  
BUG Rating: B2 - U0 - G2

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: 28.75 FT

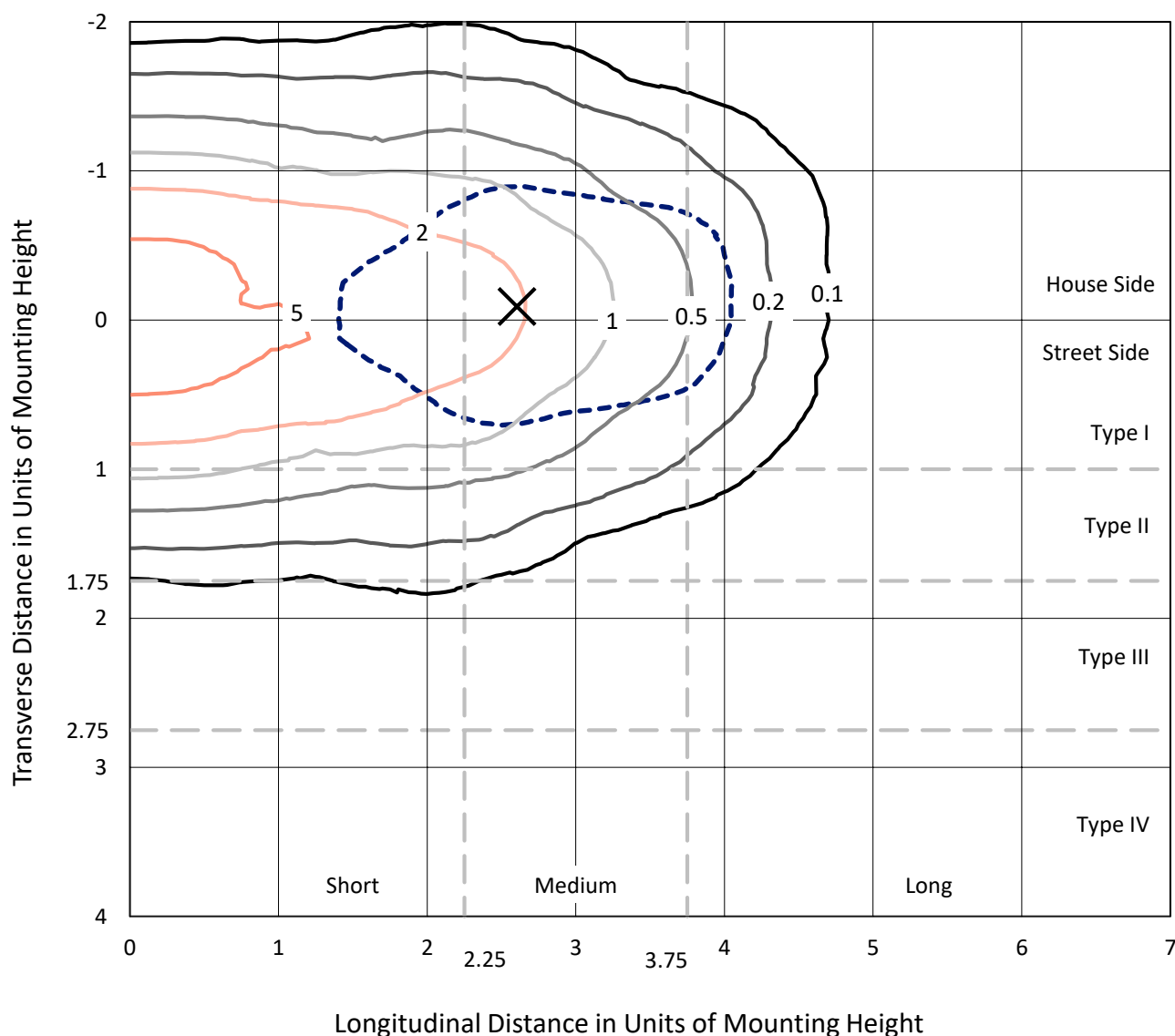


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

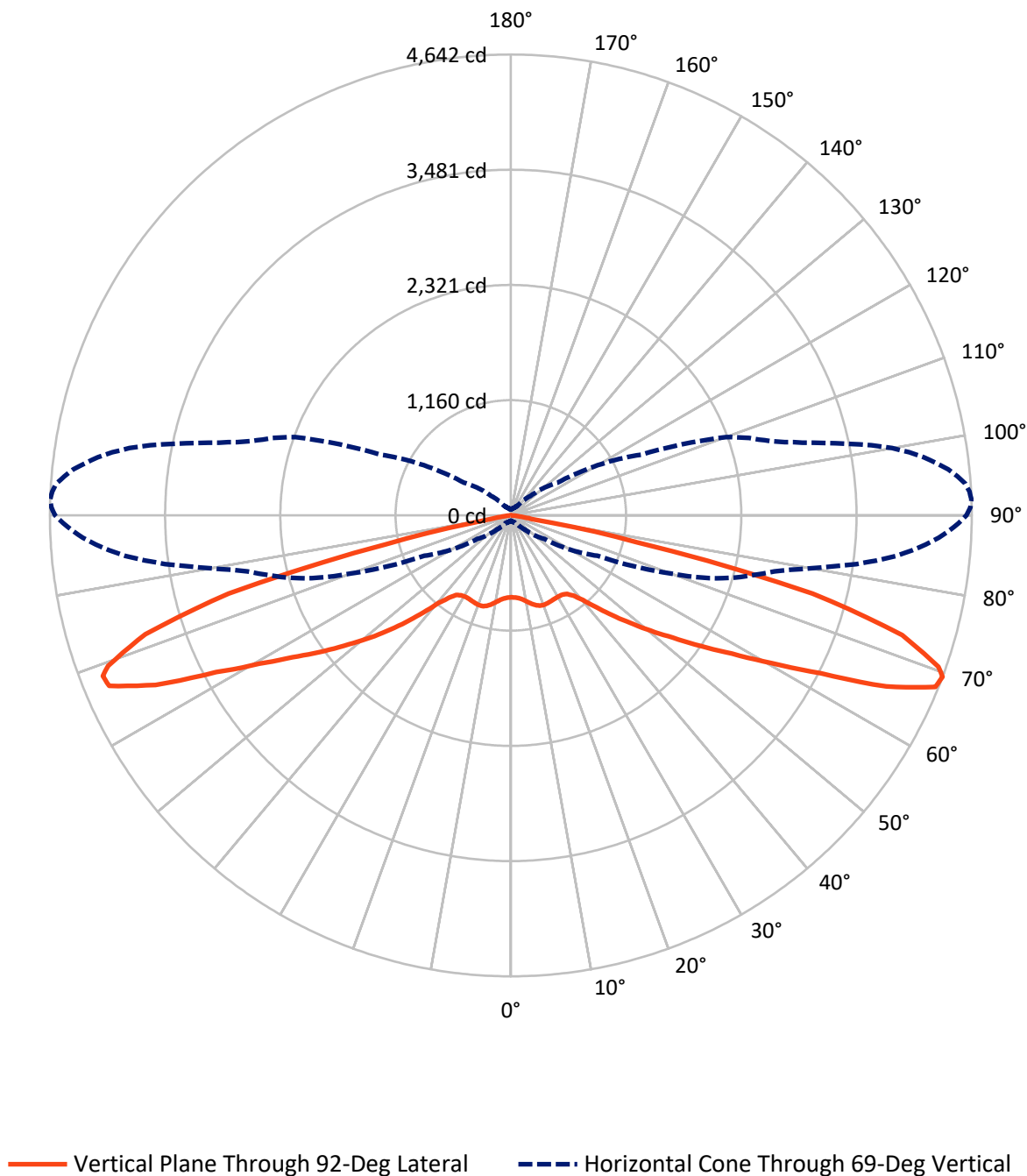


Based on 10 foot mounting height. Maximum calculated value = 8.5 fc  
 Type I - Medium - Full Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2302.4   | 0.0    | 2302.4 |
|                    | % Fixture | 53.0     | 0.0    | 53.0   |
| <b>Street Side</b> | Lumens    | 2038.9   | 0.0    | 2038.9 |
|                    | % Fixture | 47.0     | 0.0    | 47.0   |
| <b>Total</b>       | Lumens    | 4341.2   | 0.0    | 4341.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 80.7   | 1.9       |
| 10°-20°   | 254.9  | 5.9       |
| 20°-30°   | 413.6  | 9.5       |
| 30°-40°   | 515.4  | 11.9      |
| 40°-50°   | 641.7  | 14.8      |
| 50°-60°   | 791.4  | 18.2      |
| 60°-70°   | 982.9  | 22.6      |
| 70°-80°   | 603.9  | 13.9      |
| 80°-90°   | 56.6   | 1.3       |
| 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°    | 4341.2 | 100.0     |
| 0°-180°   | 4341.2 | 100.0     |

**Coefficient of Utilization**



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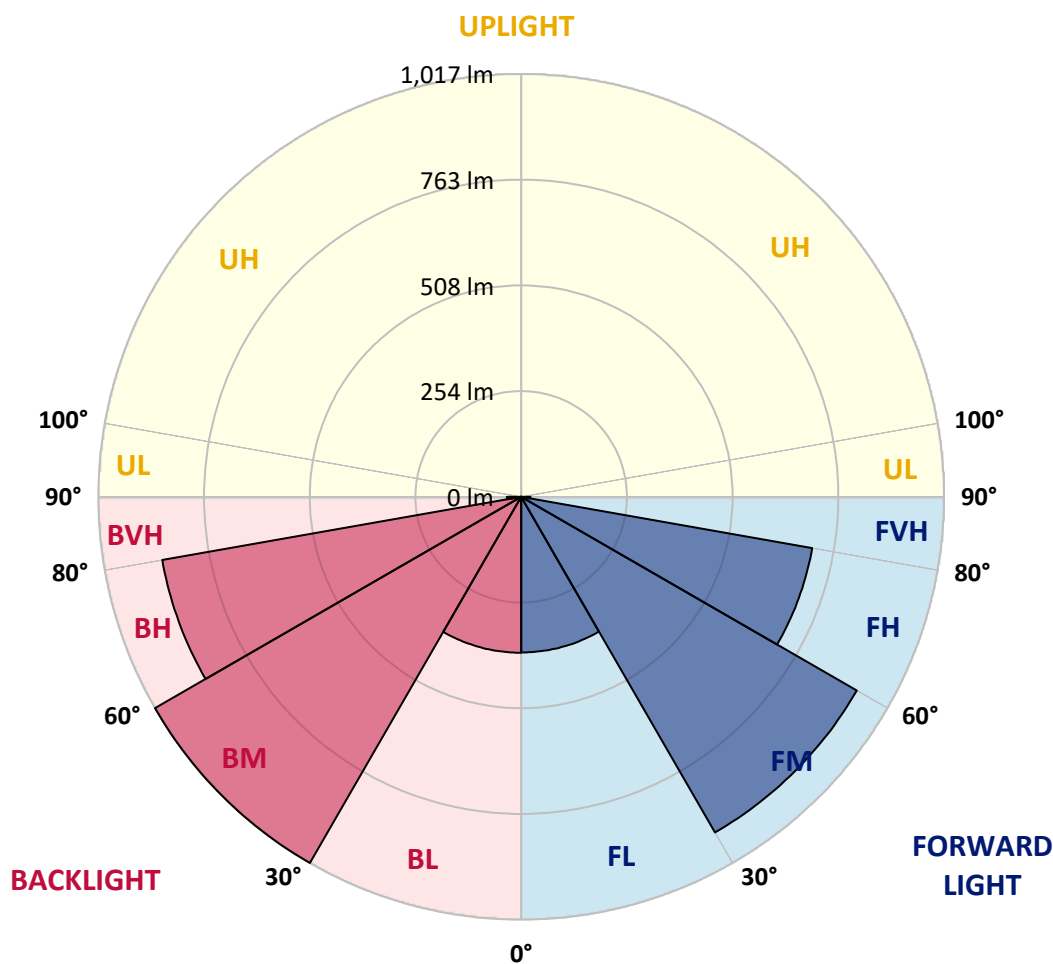
CATALOG NUMBER: VST-F02-LED-E-U-RW-8030

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 374.2  | 8.6       |                         |      |         |
| FM   | (30°-60°)   | 931.9  | 21.5      |                         |      |         |
| FH   | (60°-80°)   | 710.6  | 16.4      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 22.2   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 375.0  | 8.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1016.7 | 23.4      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 876.3  | 20.2      | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 34.4   | 0.8       |                         |      | 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 I Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°    | 70°    | 71°    | 72°    |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 0°    | 824.6 | 824.6 | 824.6 | 824.6 | 824.6 | 824.6 | 824.6 | 824.6  | 824.6  | 824.6  | 824.6  |
| 2.5°  | 837.8 | 835.5 | 837.5 | 837.8 | 837.5 | 837.5 | 835.0 | 834.4  | 831.1  | 831.9  | 831.6  |
| 5°    | 849.2 | 848.3 | 849.7 | 850.3 | 850.9 | 849.7 | 847.8 | 847.0  | 844.7  | 843.9  | 843.6  |
| 7.5°  | 859.8 | 858.4 | 860.6 | 862.6 | 863.9 | 864.2 | 864.5 | 863.1  | 863.1  | 862.0  | 862.0  |
| 10°   | 868.7 | 867.6 | 871.2 | 873.7 | 878.2 | 880.7 | 883.4 | 885.4  | 886.5  | 886.8  | 886.5  |
| 12.5° | 872.6 | 871.7 | 877.6 | 885.1 | 893.5 | 899.3 | 906.3 | 911.3  | 912.7  | 912.4  | 913.9  |
| 15°   | 865.9 | 866.5 | 875.4 | 890.2 | 908.0 | 922.7 | 932.5 | 936.7  | 937.8  | 938.3  | 938.6  |
| 17.5° | 847.8 | 848.9 | 861.7 | 885.7 | 916.9 | 943.7 | 958.1 | 958.1  | 955.9  | 955.9  | 955.6  |
| 20°   | 818.8 | 819.9 | 836.6 | 871.2 | 917.2 | 958.1 | 978.8 | 974.6  | 966.2  | 964.6  | 962.9  |
| 22.5° | 778.7 | 783.1 | 801.5 | 841.7 | 905.2 | 962.3 | 991.6 | 985.4  | 972.4  | 968.8  | 966.2  |
| 25°   | 733.3 | 732.7 | 754.7 | 799.9 | 876.2 | 952.3 | 995.2 | 994.1  | 980.2  | 976.3  | 971.8  |
| 27.5° | 681.4 | 683.1 | 703.4 | 749.2 | 831.9 | 923.3 | 989.1 | 1003.9 | 992.5  | 988.5  | 984.4  |
| 30°   | 628.2 | 629.8 | 649.1 | 702.3 | 781.4 | 881.8 | 976.6 | 1013.3 | 1008.9 | 1005.8 | 1003.0 |
| 32.5° | 574.7 | 575.2 | 598.1 | 655.2 | 738.8 | 832.2 | 957.6 | 1022.0 | 1028.1 | 1026.7 | 1025.6 |
| 35°   | 524.5 | 525.1 | 549.8 | 607.9 | 696.7 | 789.8 | 934.7 | 1034.5 | 1054.3 | 1056.0 | 1057.1 |
| 37.5° | 475.7 | 476.6 | 501.9 | 562.7 | 655.2 | 757.7 | 909.4 | 1053.7 | 1091.1 | 1097.2 | 1098.4 |
| 40°   | 427.3 | 428.1 | 452.3 | 516.7 | 613.1 | 729.6 | 889.9 | 1080.8 | 1140.7 | 1149.1 | 1157.7 |
| 42.5° | 381.0 | 384.1 | 404.6 | 466.3 | 566.3 | 694.8 | 881.5 | 1113.7 | 1199.5 | 1212.6 | 1222.4 |
| 45°   | 337.8 | 338.0 | 361.4 | 419.2 | 510.8 | 647.7 | 875.9 | 1151.0 | 1265.3 | 1285.1 | 1298.5 |
| 47.5° | 291.5 | 294.8 | 319.4 | 375.4 | 459.0 | 589.4 | 858.1 | 1194.8 | 1336.9 | 1360.0 | 1387.1 |
| 50°   | 246.7 | 251.4 | 275.1 | 330.5 | 411.7 | 529.3 | 810.2 | 1246.0 | 1417.4 | 1447.6 | 1478.8 |
| 52.5° | 203.5 | 203.2 | 228.2 | 286.0 | 364.0 | 478.3 | 732.4 | 1299.8 | 1510.5 | 1542.8 | 1576.6 |
| 55°   | 153.8 | 153.8 | 178.6 | 231.3 | 312.4 | 432.8 | 649.1 | 1333.3 | 1596.9 | 1636.0 | 1672.7 |
| 57.5° | 105.6 | 108.4 | 131.8 | 177.2 | 258.6 | 391.3 | 585.2 | 1314.1 | 1663.0 | 1711.4 | 1755.2 |
| 60°   | 78.3  | 81.1  | 98.4  | 127.4 | 202.3 | 342.2 | 537.3 | 1223.5 | 1702.8 | 1767.2 | 1824.1 |
| 62.5° | 67.7  | 69.7  | 86.1  | 102.0 | 145.7 | 290.1 | 494.9 | 1108.4 | 1760.2 | 1848.3 | 1927.4 |
| 65°   | 60.5  | 62.4  | 78.9  | 88.1  | 114.0 | 233.3 | 471.3 | 1042.6 | 1828.8 | 1963.4 | 2078.2 |
| 67.5° | 56.0  | 58.3  | 72.2  | 78.9  | 99.5  | 211.0 | 452.9 | 1027.3 | 1828.3 | 1991.5 | 2138.2 |
| 69°   | 53.8  | 55.4  | 66.9  | 74.2  | 96.1  | 204.3 | 413.0 | 960.7  | 1707.5 | 1882.9 | 2030.0 |
| 70°   | 52.4  | 54.1  | 63.8  | 71.0  | 95.0  | 192.3 | 376.3 | 872.6  | 1570.1 | 1746.6 | 1895.9 |
| 72.5° | 47.9  | 49.6  | 56.9  | 63.5  | 79.1  | 128.5 | 262.3 | 558.5  | 1122.0 | 1248.0 | 1418.8 |
| 75°   | 42.4  | 44.3  | 49.9  | 55.4  | 59.9  | 74.4  | 151.3 | 289.9  | 641.6  | 737.2  | 889.3  |
| 77.5° | 34.6  | 36.5  | 42.4  | 51.3  | 50.7  | 56.6  | 98.4  | 178.1  | 300.4  | 372.6  | 428.9  |
| 80°   | 28.4  | 29.8  | 34.9  | 51.8  | 41.5  | 47.4  | 79.7  | 146.0  | 211.5  | 233.8  | 247.2  |
| 82.5° | 19.0  | 20.9  | 27.1  | 40.7  | 31.8  | 33.7  | 59.6  | 136.6  | 178.9  | 196.2  | 212.3  |
| 85°   | 8.9   | 9.8   | 16.4  | 21.7  | 19.2  | 18.1  | 34.0  | 96.4   | 133.2  | 141.3  | 147.4  |
| 87.5° | 0.0   | 0.0   | 0.8   | 1.7   | 2.5   | 2.5   | 6.1   | 20.3   | 37.3   | 45.1   | 44.6   |
| 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°    | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  |
| 2.5°  | 830.5  | 830.8  | 830.5  | 830.5  | 830.2  | 829.7  | 829.7  | 829.1  | 829.4  | 829.1  | 829.7  |
| 5°    | 843.3  | 843.3  | 842.5  | 841.9  | 842.8  | 841.9  | 842.2  | 840.8  | 840.8  | 840.0  | 838.9  |
| 7.5°  | 861.7  | 861.7  | 862.0  | 860.3  | 861.4  | 861.7  | 860.9  | 860.3  | 859.8  | 858.4  | 858.7  |
| 10°   | 886.3  | 886.3  | 887.1  | 884.9  | 886.0  | 886.5  | 886.8  | 886.8  | 886.3  | 883.7  | 884.0  |
| 12.5° | 913.6  | 913.0  | 913.3  | 912.2  | 913.3  | 913.9  | 914.4  | 913.9  | 913.9  | 913.3  | 913.0  |
| 15°   | 938.3  | 938.1  | 938.6  | 937.8  | 938.1  | 938.6  | 940.3  | 940.0  | 939.8  | 938.1  | 938.1  |
| 17.5° | 955.4  | 954.5  | 954.0  | 953.7  | 953.7  | 953.4  | 953.7  | 953.7  | 952.9  | 952.6  | 952.6  |
| 20°   | 961.8  | 959.5  | 958.1  | 957.3  | 956.2  | 955.6  | 955.1  | 955.4  | 954.8  | 954.0  | 954.2  |
| 22.5° | 962.9  | 959.8  | 957.1  | 954.5  | 952.3  | 950.9  | 949.5  | 949.0  | 947.6  | 946.7  | 946.7  |
| 25°   | 968.2  | 963.4  | 959.0  | 954.8  | 951.5  | 948.4  | 945.4  | 943.1  | 941.4  | 939.5  | 938.9  |
| 27.5° | 979.9  | 974.9  | 969.6  | 964.3  | 959.8  | 953.7  | 949.5  | 945.1  | 941.2  | 938.1  | 935.9  |
| 30°   | 998.0  | 993.0  | 987.7  | 981.5  | 975.7  | 969.3  | 962.3  | 957.1  | 951.5  | 945.4  | 942.0  |
| 32.5° | 1022.0 | 1018.6 | 1013.3 | 1007.5 | 1002.2 | 995.5  | 987.1  | 979.1  | 973.7  | 966.5  | 961.2  |
| 35°   | 1056.2 | 1052.3 | 1050.7 | 1048.1 | 1042.9 | 1038.7 | 1029.5 | 1022.0 | 1016.9 | 1006.9 | 1003.0 |
| 37.5° | 1103.1 | 1102.8 | 1104.2 | 1103.3 | 1104.2 | 1098.9 | 1094.7 | 1094.5 | 1087.2 | 1077.4 | 1067.9 |
| 40°   | 1166.9 | 1170.2 | 1177.7 | 1183.1 | 1188.1 | 1188.7 | 1194.5 | 1188.4 | 1189.2 | 1187.8 | 1178.0 |
| 42.5° | 1239.7 | 1251.1 | 1260.0 | 1275.6 | 1287.5 | 1298.7 | 1306.3 | 1316.6 | 1324.4 | 1331.3 | 1333.0 |
| 45°   | 1320.7 | 1337.8 | 1358.3 | 1372.3 | 1395.7 | 1414.4 | 1440.0 | 1459.8 | 1480.4 | 1500.8 | 1508.0 |
| 47.5° | 1408.8 | 1430.0 | 1452.8 | 1478.8 | 1508.3 | 1537.6 | 1577.2 | 1607.5 | 1640.7 | 1668.2 | 1692.8 |
| 50°   | 1506.1 | 1528.1 | 1558.7 | 1588.6 | 1629.2 | 1663.0 | 1714.8 | 1754.6 | 1808.2 | 1844.9 | 1876.7 |
| 52.5° | 1607.5 | 1635.1 | 1669.4 | 1702.3 | 1743.8 | 1787.0 | 1844.7 | 1903.5 | 1967.9 | 2023.6 | 2069.9 |
| 55°   | 1706.7 | 1740.7 | 1773.6 | 1812.1 | 1858.1 | 1908.2 | 1973.5 | 2050.9 | 2131.2 | 2195.0 | 2256.3 |
| 57.5° | 1795.1 | 1834.4 | 1873.1 | 1912.1 | 1959.2 | 2017.4 | 2090.8 | 2174.4 | 2266.3 | 2351.3 | 2435.5 |
| 60°   | 1877.0 | 1924.1 | 1971.5 | 2020.3 | 2074.3 | 2146.2 | 2234.3 | 2337.1 | 2456.2 | 2572.3 | 2682.4 |
| 62.5° | 2006.6 | 2068.4 | 2127.3 | 2190.2 | 2255.5 | 2339.9 | 2443.9 | 2578.7 | 2715.3 | 2860.5 | 2973.4 |
| 65°   | 2182.2 | 2269.1 | 2346.1 | 2427.7 | 2512.1 | 2625.0 | 2749.3 | 2910.7 | 3106.3 | 3255.1 | 3436.3 |
| 67.5° | 2269.4 | 2384.0 | 2482.9 | 2573.8 | 2678.3 | 2792.2 | 2939.9 | 3130.9 | 3339.6 | 3555.3 | 3757.4 |
| 69°   | 2166.8 | 2285.0 | 2394.5 | 2496.2 | 2601.9 | 2712.5 | 2866.9 | 3062.8 | 3283.6 | 3516.8 | 3714.2 |
| 70°   | 2033.9 | 2152.1 | 2268.8 | 2384.8 | 2481.2 | 2589.1 | 2744.0 | 2946.1 | 3166.5 | 3409.0 | 3604.6 |
| 72.5° | 1558.2 | 1700.3 | 1805.9 | 1914.6 | 2026.4 | 2117.8 | 2296.7 | 2467.0 | 2696.6 | 2942.8 | 3158.2 |
| 75°   | 996.9  | 1127.6 | 1243.0 | 1335.5 | 1444.7 | 1554.3 | 1686.4 | 1875.6 | 2019.4 | 2221.5 | 2396.2 |
| 77.5° | 512.2  | 551.0  | 662.2  | 695.3  | 771.1  | 830.8  | 903.5  | 950.9  | 1067.9 | 1092.8 | 1195.9 |
| 80°   | 242.8  | 218.8  | 206.0  | 194.2  | 197.6  | 196.2  | 190.3  | 182.5  | 192.3  | 188.1  | 186.4  |
| 82.5° | 211.5  | 188.7  | 150.5  | 127.9  | 110.6  | 93.9   | 80.8   | 74.2   | 74.9   | 77.2   | 78.1   |
| 85°   | 148.3  | 139.3  | 108.7  | 82.5   | 64.4   | 49.9   | 40.1   | 38.5   | 39.6   | 42.7   | 41.5   |
| 87.5° | 42.9   | 44.9   | 39.6   | 27.6   | 19.2   | 13.9   | 10.9   | 12.2   | 11.7   | 11.4   | 12.0   |
| 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°    | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  |
| 2.5°  | 829.7  | 829.4  | 828.5  | 827.7  | 827.7  | 827.2  | 827.7  | 828.0  | 827.7  | 827.7  | 827.2  |
| 5°    | 839.2  | 839.4  | 840.2  | 838.6  | 838.3  | 838.6  | 837.5  | 837.2  | 836.3  | 837.2  | 836.1  |
| 7.5°  | 857.3  | 858.1  | 858.1  | 857.0  | 856.7  | 857.5  | 855.8  | 855.3  | 854.5  | 854.2  | 853.9  |
| 10°   | 884.3  | 885.1  | 883.7  | 882.9  | 882.1  | 883.2  | 881.8  | 881.8  | 881.0  | 880.1  | 879.8  |
| 12.5° | 914.4  | 913.9  | 913.3  | 913.9  | 913.0  | 913.0  | 912.2  | 911.6  | 911.3  | 911.0  | 910.5  |
| 15°   | 937.8  | 939.8  | 939.8  | 940.3  | 939.8  | 939.8  | 938.6  | 938.9  | 938.3  | 938.1  | 938.3  |
| 17.5° | 952.9  | 953.4  | 954.8  | 955.6  | 955.6  | 955.9  | 955.4  | 955.9  | 955.4  | 955.4  | 956.5  |
| 20°   | 954.8  | 955.4  | 956.8  | 958.1  | 959.0  | 959.5  | 959.5  | 960.4  | 961.0  | 961.5  | 962.9  |
| 22.5° | 947.0  | 947.8  | 949.5  | 952.0  | 953.4  | 954.0  | 955.1  | 956.5  | 957.9  | 959.0  | 961.0  |
| 25°   | 938.9  | 939.2  | 940.9  | 943.4  | 945.1  | 946.4  | 948.4  | 950.0  | 952.0  | 954.2  | 956.5  |
| 27.5° | 934.4  | 934.2  | 935.6  | 938.1  | 939.5  | 941.4  | 943.1  | 945.6  | 947.8  | 950.6  | 952.6  |
| 30°   | 938.3  | 936.1  | 936.4  | 937.5  | 938.6  | 940.0  | 942.0  | 944.2  | 946.7  | 949.3  | 951.5  |
| 32.5° | 955.6  | 950.6  | 947.3  | 946.4  | 946.7  | 947.0  | 948.1  | 949.5  | 951.5  | 953.4  | 954.2  |
| 35°   | 993.0  | 984.4  | 979.9  | 976.3  | 973.2  | 970.7  | 971.2  | 971.0  | 971.0  | 972.7  | 970.7  |
| 37.5° | 1064.0 | 1053.2 | 1048.4 | 1042.0 | 1038.4 | 1029.2 | 1026.7 | 1026.2 | 1022.5 | 1022.5 | 1018.3 |
| 40°   | 1175.5 | 1169.1 | 1165.5 | 1159.6 | 1142.1 | 1144.3 | 1131.8 | 1132.1 | 1121.8 | 1122.8 | 1115.6 |
| 42.5° | 1334.1 | 1334.9 | 1330.5 | 1326.6 | 1312.9 | 1306.8 | 1295.1 | 1278.4 | 1265.3 | 1265.0 | 1250.5 |
| 45°   | 1517.5 | 1527.5 | 1513.3 | 1518.3 | 1506.4 | 1489.9 | 1476.2 | 1454.8 | 1434.4 | 1428.0 | 1413.2 |
| 47.5° | 1709.2 | 1725.7 | 1714.8 | 1716.8 | 1710.9 | 1687.5 | 1669.1 | 1642.6 | 1616.2 | 1598.3 | 1589.4 |
| 50°   | 1914.1 | 1924.9 | 1924.7 | 1919.3 | 1916.6 | 1893.7 | 1864.2 | 1844.1 | 1824.6 | 1800.7 | 1792.9 |
| 52.5° | 2099.7 | 2125.0 | 2142.1 | 2138.2 | 2130.1 | 2116.4 | 2090.2 | 2072.9 | 2044.2 | 2040.9 | 2044.2 |
| 55°   | 2298.4 | 2331.3 | 2348.6 | 2369.5 | 2369.8 | 2367.2 | 2356.4 | 2350.0 | 2323.2 | 2326.3 | 2322.4 |
| 57.5° | 2486.5 | 2534.7 | 2561.2 | 2605.8 | 2621.1 | 2641.4 | 2633.9 | 2642.3 | 2626.1 | 2636.7 | 2633.6 |
| 60°   | 2741.5 | 2808.4 | 2852.5 | 2913.5 | 2941.9 | 2992.9 | 3002.9 | 3009.1 | 3018.0 | 3039.7 | 3027.5 |
| 62.5° | 3062.3 | 3160.4 | 3251.8 | 3334.9 | 3362.2 | 3438.8 | 3451.3 | 3499.3 | 3501.8 | 3516.5 | 3489.5 |
| 65°   | 3587.3 | 3706.9 | 3807.5 | 3907.0 | 3964.4 | 4054.1 | 4090.4 | 4183.5 | 4155.1 | 4167.1 | 4109.3 |
| 67.5° | 3931.3 | 4070.3 | 4205.2 | 4299.4 | 4394.7 | 4486.4 | 4552.5 | 4612.7 | 4612.1 | 4600.4 | 4549.1 |
| 69°   | 3900.9 | 4055.8 | 4188.8 | 4315.0 | 4415.3 | 4509.5 | 4589.0 | 4628.0 | 4641.7 | 4624.7 | 4588.1 |
| 70°   | 3795.8 | 3955.0 | 4117.7 | 4221.7 | 4330.9 | 4434.3 | 4516.3 | 4558.9 | 4568.3 | 4556.4 | 4524.9 |
| 72.5° | 3310.3 | 3463.1 | 3642.5 | 3737.0 | 3869.1 | 3943.8 | 4056.7 | 4111.9 | 4121.6 | 4106.3 | 4085.6 |
| 75°   | 2583.5 | 2611.1 | 2793.9 | 2854.1 | 2950.0 | 3036.1 | 3106.3 | 3088.5 | 3138.4 | 3128.6 | 3120.8 |
| 77.5° | 1217.0 | 1143.5 | 1261.9 | 1317.1 | 1288.1 | 1210.9 | 1323.2 | 1242.1 | 1295.9 | 1365.9 | 1348.0 |
| 80°   | 200.6  | 200.1  | 205.4  | 217.1  | 203.2  | 215.7  | 215.5  | 209.3  | 209.9  | 224.9  | 217.1  |
| 82.5° | 77.2   | 78.9   | 79.7   | 82.0   | 82.0   | 82.2   | 83.6   | 85.3   | 83.9   | 86.7   | 86.1   |
| 85°   | 41.8   | 44.6   | 42.1   | 40.1   | 41.5   | 42.4   | 43.5   | 44.9   | 43.5   | 47.6   | 45.4   |
| 87.5° | 10.9   | 11.4   | 10.0   | 10.0   | 9.8    | 8.9    | 8.9    | 9.5    | 10.3   | 12.2   | 13.4   |
| 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°    | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  |
| 2.5°  | 826.0  | 826.3  | 826.6  | 825.8  | 825.2  | 825.2  | 824.9  | 824.4  | 824.1  | 824.1  | 824.1  |
| 5°    | 835.5  | 836.1  | 834.7  | 834.4  | 833.9  | 833.3  | 833.3  | 832.7  | 833.0  | 833.0  | 831.6  |
| 7.5°  | 854.5  | 853.6  | 851.9  | 850.9  | 851.9  | 850.0  | 849.2  | 849.7  | 849.2  | 849.5  | 848.9  |
| 10°   | 879.8  | 879.8  | 877.9  | 879.0  | 877.6  | 875.4  | 876.2  | 875.4  | 874.8  | 872.9  | 874.0  |
| 12.5° | 911.3  | 910.5  | 909.4  | 906.9  | 906.1  | 905.8  | 903.2  | 903.5  | 902.7  | 902.2  | 901.3  |
| 15°   | 938.9  | 938.6  | 936.1  | 934.7  | 934.4  | 933.4  | 932.2  | 931.7  | 930.3  | 930.0  | 929.5  |
| 17.5° | 957.3  | 956.5  | 955.4  | 954.0  | 954.0  | 952.3  | 951.7  | 950.3  | 950.0  | 949.3  | 948.4  |
| 20°   | 963.4  | 963.7  | 962.6  | 961.5  | 961.0  | 959.8  | 959.0  | 957.9  | 957.3  | 956.2  | 955.4  |
| 22.5° | 962.0  | 962.0  | 961.0  | 960.7  | 959.5  | 957.9  | 956.8  | 955.4  | 954.0  | 952.6  | 950.9  |
| 25°   | 957.6  | 957.3  | 956.5  | 955.1  | 953.7  | 951.2  | 949.0  | 946.7  | 944.8  | 943.1  | 940.6  |
| 27.5° | 953.7  | 953.2  | 951.5  | 949.5  | 946.7  | 943.9  | 939.8  | 936.7  | 934.2  | 932.0  | 929.2  |
| 30°   | 952.3  | 950.3  | 947.8  | 944.8  | 941.4  | 937.3  | 932.8  | 928.9  | 926.1  | 923.9  | 922.7  |
| 32.5° | 954.0  | 951.5  | 947.6  | 943.7  | 939.5  | 934.4  | 930.0  | 926.6  | 924.2  | 923.6  | 923.6  |
| 35°   | 969.3  | 965.1  | 959.8  | 954.2  | 949.0  | 944.8  | 941.7  | 941.4  | 939.8  | 941.7  | 944.8  |
| 37.5° | 1014.2 | 1010.5 | 1002.5 | 995.2  | 991.6  | 989.6  | 986.9  | 987.4  | 983.5  | 989.6  | 994.7  |
| 40°   | 1109.5 | 1105.0 | 1095.5 | 1089.7 | 1082.5 | 1075.5 | 1081.1 | 1079.4 | 1082.2 | 1081.1 | 1086.4 |
| 42.5° | 1248.5 | 1244.1 | 1229.0 | 1226.8 | 1223.8 | 1220.9 | 1220.9 | 1218.7 | 1217.6 | 1221.5 | 1217.0 |
| 45°   | 1417.7 | 1408.8 | 1403.2 | 1409.9 | 1400.7 | 1403.5 | 1413.2 | 1400.2 | 1403.2 | 1385.1 | 1368.4 |
| 47.5° | 1593.3 | 1592.5 | 1591.1 | 1599.1 | 1600.6 | 1604.7 | 1610.0 | 1596.7 | 1572.4 | 1558.7 | 1524.7 |
| 50°   | 1795.3 | 1804.0 | 1807.3 | 1815.1 | 1818.5 | 1821.5 | 1813.2 | 1793.4 | 1752.4 | 1716.2 | 1676.0 |
| 52.5° | 2040.9 | 2025.8 | 2046.5 | 2054.0 | 2050.6 | 2038.4 | 2008.3 | 1984.0 | 1927.4 | 1875.4 | 1813.2 |
| 55°   | 2326.8 | 2330.5 | 2315.9 | 2310.1 | 2298.7 | 2264.6 | 2223.1 | 2168.5 | 2096.9 | 2028.9 | 1950.3 |
| 57.5° | 2618.0 | 2616.7 | 2594.1 | 2562.3 | 2523.6 | 2482.6 | 2420.8 | 2342.4 | 2258.8 | 2167.4 | 2072.4 |
| 60°   | 2972.3 | 2970.9 | 2925.2 | 2870.8 | 2815.6 | 2749.6 | 2652.6 | 2558.4 | 2446.4 | 2326.3 | 2213.1 |
| 62.5° | 3437.7 | 3377.8 | 3332.9 | 3251.8 | 3166.5 | 3080.1 | 2948.9 | 2823.7 | 2674.1 | 2522.5 | 2390.3 |
| 65°   | 4034.1 | 3935.5 | 3884.5 | 3766.9 | 3634.7 | 3499.9 | 3366.4 | 3201.9 | 3000.4 | 2817.1 | 2655.7 |
| 67.5° | 4475.3 | 4385.0 | 4291.6 | 4174.3 | 4029.4 | 3878.9 | 3696.1 | 3489.0 | 3260.2 | 3054.5 | 2878.6 |
| 69°   | 4514.0 | 4429.6 | 4317.5 | 4199.9 | 4062.8 | 3899.2 | 3699.7 | 3467.8 | 3235.9 | 3027.7 | 2854.7 |
| 70°   | 4455.2 | 4365.5 | 4247.6 | 4125.2 | 3971.9 | 3817.6 | 3608.5 | 3366.9 | 3134.8 | 2926.0 | 2757.1 |
| 72.5° | 4016.5 | 3929.0 | 3803.6 | 3657.3 | 3500.1 | 3368.0 | 3169.6 | 2917.6 | 2665.1 | 2472.3 | 2340.8 |
| 75°   | 3054.2 | 3035.0 | 2946.1 | 2860.8 | 2737.1 | 2589.6 | 2408.2 | 2238.8 | 2031.7 | 1827.7 | 1705.1 |
| 77.5° | 1303.2 | 1347.5 | 1393.7 | 1400.5 | 1404.9 | 1359.5 | 1331.3 | 1288.7 | 1150.2 | 1087.2 | 1022.3 |
| 80°   | 240.8  | 215.2  | 229.6  | 231.3  | 240.8  | 245.8  | 264.2  | 313.3  | 318.8  | 330.8  | 345.6  |
| 82.5° | 85.6   | 86.9   | 89.2   | 90.0   | 90.8   | 94.2   | 106.7  | 127.9  | 147.2  | 172.3  | 205.7  |
| 85°   | 48.5   | 49.3   | 51.3   | 53.0   | 54.1   | 57.4   | 64.4   | 76.9   | 95.9   | 124.6  | 168.9  |
| 87.5° | 14.8   | 16.7   | 17.8   | 20.0   | 20.9   | 21.5   | 24.5   | 32.9   | 42.4   | 62.7   | 91.4   |
| 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: VST-F02-LED-E-U-RW-8030

**CANDELA DISTRIBUTION (continued):**

|       | 106°   | 107°   | 108°   | 109°   | 110°   | 115°   | 125°  | 135°  | 145°  | 155°  | 165°  |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 0°    | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6  | 824.6 | 824.6 | 824.6 | 824.6 | 824.6 |
| 2.5°  | 824.1  | 823.8  | 823.3  | 822.7  | 823.0  | 822.4  | 820.7 | 820.2 | 818.2 | 816.8 | 815.8 |
| 5°    | 831.6  | 831.4  | 830.2  | 830.5  | 830.2  | 827.5  | 825.5 | 822.1 | 820.2 | 817.1 | 816.0 |
| 7.5°  | 847.3  | 847.0  | 845.0  | 845.8  | 845.3  | 841.1  | 837.8 | 832.4 | 829.7 | 825.8 | 822.7 |
| 10°   | 870.7  | 870.7  | 868.4  | 868.7  | 868.7  | 863.1  | 857.3 | 848.3 | 841.9 | 835.8 | 830.5 |
| 12.5° | 899.0  | 898.0  | 897.7  | 896.3  | 895.1  | 889.0  | 880.1 | 868.1 | 856.1 | 846.1 | 838.9 |
| 15°   | 927.8  | 926.1  | 925.3  | 923.6  | 922.2  | 916.6  | 904.6 | 889.9 | 873.7 | 857.5 | 845.6 |
| 17.5° | 946.4  | 945.4  | 943.7  | 943.1  | 941.2  | 935.6  | 927.2 | 912.4 | 892.4 | 869.8 | 851.7 |
| 20°   | 953.4  | 951.5  | 950.3  | 949.3  | 948.1  | 944.2  | 944.2 | 934.7 | 912.4 | 880.7 | 853.1 |
| 22.5° | 949.0  | 947.8  | 946.1  | 945.4  | 944.2  | 944.8  | 955.6 | 954.2 | 928.6 | 883.2 | 843.1 |
| 25°   | 938.6  | 937.3  | 935.9  | 935.9  | 935.6  | 941.4  | 967.6 | 971.2 | 933.4 | 870.9 | 821.0 |
| 27.5° | 928.1  | 926.1  | 926.6  | 926.9  | 928.3  | 940.9  | 980.7 | 975.7 | 920.5 | 841.4 | 783.1 |
| 30°   | 921.7  | 921.7  | 923.0  | 925.3  | 928.1  | 950.0  | 991.0 | 965.7 | 887.3 | 796.8 | 733.0 |
| 32.5° | 924.4  | 927.2  | 930.3  | 935.9  | 940.0  | 970.4  | 994.7 | 939.8 | 839.2 | 741.6 | 680.6 |
| 35°   | 949.3  | 952.6  | 958.4  | 967.1  | 972.1  | 999.7  | 994.7 | 901.9 | 783.1 | 694.2 | 626.5 |
| 37.5° | 1003.3 | 1006.6 | 1013.6 | 1020.3 | 1025.3 | 1036.4 | 990.5 | 853.6 | 736.3 | 645.2 | 578.0 |
| 40°   | 1090.3 | 1095.0 | 1100.0 | 1098.9 | 1095.5 | 1084.7 | 982.1 | 808.8 | 693.1 | 602.3 | 530.3 |
| 42.5° | 1212.6 | 1208.2 | 1207.6 | 1196.7 | 1185.5 | 1139.0 | 976.0 | 779.5 | 656.0 | 557.1 | 483.0 |
| 45°   | 1353.9 | 1335.8 | 1317.1 | 1302.6 | 1285.6 | 1198.7 | 974.3 | 755.8 | 615.1 | 506.9 | 431.4 |
| 47.5° | 1496.0 | 1467.1 | 1430.8 | 1408.3 | 1380.7 | 1262.2 | 979.3 | 724.0 | 562.4 | 452.3 | 383.2 |
| 50°   | 1635.4 | 1588.0 | 1543.1 | 1516.1 | 1484.9 | 1335.2 | 987.4 | 670.6 | 499.4 | 402.7 | 339.2 |
| 52.5° | 1764.4 | 1703.4 | 1657.4 | 1625.6 | 1587.4 | 1420.2 | 980.2 | 600.3 | 444.8 | 355.1 | 297.4 |
| 55°   | 1887.1 | 1819.6 | 1771.9 | 1738.5 | 1693.6 | 1505.5 | 927.8 | 536.5 | 392.7 | 308.5 | 250.3 |
| 57.5° | 1994.3 | 1929.7 | 1880.1 | 1834.6 | 1796.8 | 1579.6 | 824.4 | 483.8 | 342.5 | 255.3 | 199.3 |
| 60°   | 2119.7 | 2047.0 | 1988.2 | 1939.7 | 1895.1 | 1617.8 | 708.4 | 437.0 | 289.0 | 197.6 | 144.1 |
| 62.5° | 2288.9 | 2205.3 | 2137.3 | 2081.8 | 2023.6 | 1626.2 | 629.3 | 390.2 | 229.4 | 143.0 | 104.8 |
| 65°   | 2539.7 | 2436.6 | 2351.6 | 2275.3 | 2196.4 | 1591.6 | 590.3 | 339.2 | 170.6 | 106.2 | 87.8  |
| 67.5° | 2739.0 | 2632.0 | 2533.6 | 2435.5 | 2334.6 | 1527.5 | 581.6 | 292.1 | 131.0 | 90.3  | 78.9  |
| 69°   | 2714.8 | 2612.8 | 2522.5 | 2416.3 | 2304.5 | 1447.0 | 573.0 | 274.0 | 119.6 | 83.9  | 74.7  |
| 70°   | 2621.4 | 2524.7 | 2433.0 | 2346.6 | 2209.7 | 1357.3 | 550.1 | 263.9 | 115.1 | 80.8  | 71.6  |
| 72.5° | 2215.1 | 2103.0 | 2014.1 | 1906.6 | 1762.4 | 1008.6 | 417.2 | 213.5 | 105.6 | 73.9  | 64.7  |
| 75°   | 1615.6 | 1522.8 | 1434.2 | 1315.1 | 1175.0 | 583.6  | 259.7 | 122.0 | 77.5  | 66.9  | 58.5  |
| 77.5° | 943.4  | 922.5  | 836.9  | 758.6  | 619.8  | 297.1  | 149.1 | 73.0  | 60.2  | 60.8  | 51.5  |
| 80°   | 355.1  | 378.2  | 386.8  | 359.8  | 332.5  | 205.1  | 108.4 | 59.3  | 52.4  | 59.9  | 43.7  |
| 82.5° | 258.9  | 300.4  | 305.5  | 292.6  | 272.3  | 191.2  | 86.7  | 47.6  | 42.7  | 64.4  | 37.6  |
| 85°   | 216.0  | 239.1  | 242.8  | 229.4  | 222.7  | 161.9  | 60.5  | 33.4  | 31.2  | 46.3  | 28.1  |
| 87.5° | 109.3  | 115.1  | 118.1  | 107.0  | 107.6  | 75.5   | 24.2  | 14.2  | 17.0  | 19.8  | 15.6  |
| 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°    | 824.6 | 824.6 |
| 2.5°  | 813.2 | 814.9 |
| 5°    | 814.3 | 814.3 |
| 7.5°  | 820.7 | 820.7 |
| 10°   | 827.7 | 828.0 |
| 12.5° | 834.1 | 833.9 |
| 15°   | 839.2 | 838.3 |
| 17.5° | 842.2 | 841.4 |
| 20°   | 839.2 | 837.8 |
| 22.5° | 823.6 | 819.7 |
| 25°   | 795.1 | 790.1 |
| 27.5° | 757.5 | 754.1 |
| 30°   | 708.4 | 703.4 |
| 32.5° | 651.0 | 648.5 |
| 35°   | 596.1 | 593.0 |
| 37.5° | 545.9 | 545.1 |
| 40°   | 503.6 | 499.1 |
| 42.5° | 454.0 | 452.0 |
| 45°   | 403.6 | 402.4 |
| 47.5° | 356.2 | 355.1 |
| 50°   | 312.4 | 310.2 |
| 52.5° | 269.5 | 265.9 |
| 55°   | 221.8 | 219.4 |
| 57.5° | 170.3 | 168.1 |
| 60°   | 119.8 | 117.4 |
| 62.5° | 85.3  | 82.5  |
| 65°   | 71.0  | 68.8  |
| 67.5° | 64.4  | 61.9  |
| 69°   | 61.3  | 59.1  |
| 70°   | 59.3  | 57.7  |
| 72.5° | 55.2  | 54.1  |
| 75°   | 50.5  | 49.6  |
| 77.5° | 44.3  | 42.9  |
| 80°   | 37.1  | 35.7  |
| 82.5° | 31.2  | 29.8  |
| 85°   | 20.9  | 19.0  |
| 87.5° | 9.5   | 8.3   |
| 90°   | 0.0   | 0.0   |

(END OF REPORT)