

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: P195115

Luminaire Tested: **NVN-AF-01-LED-U-SL2-7060-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P195115  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24258)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-AF-01-LED-U-SL2-7060-1200-HSS  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5700K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5467 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 67  
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: 28.75 FT

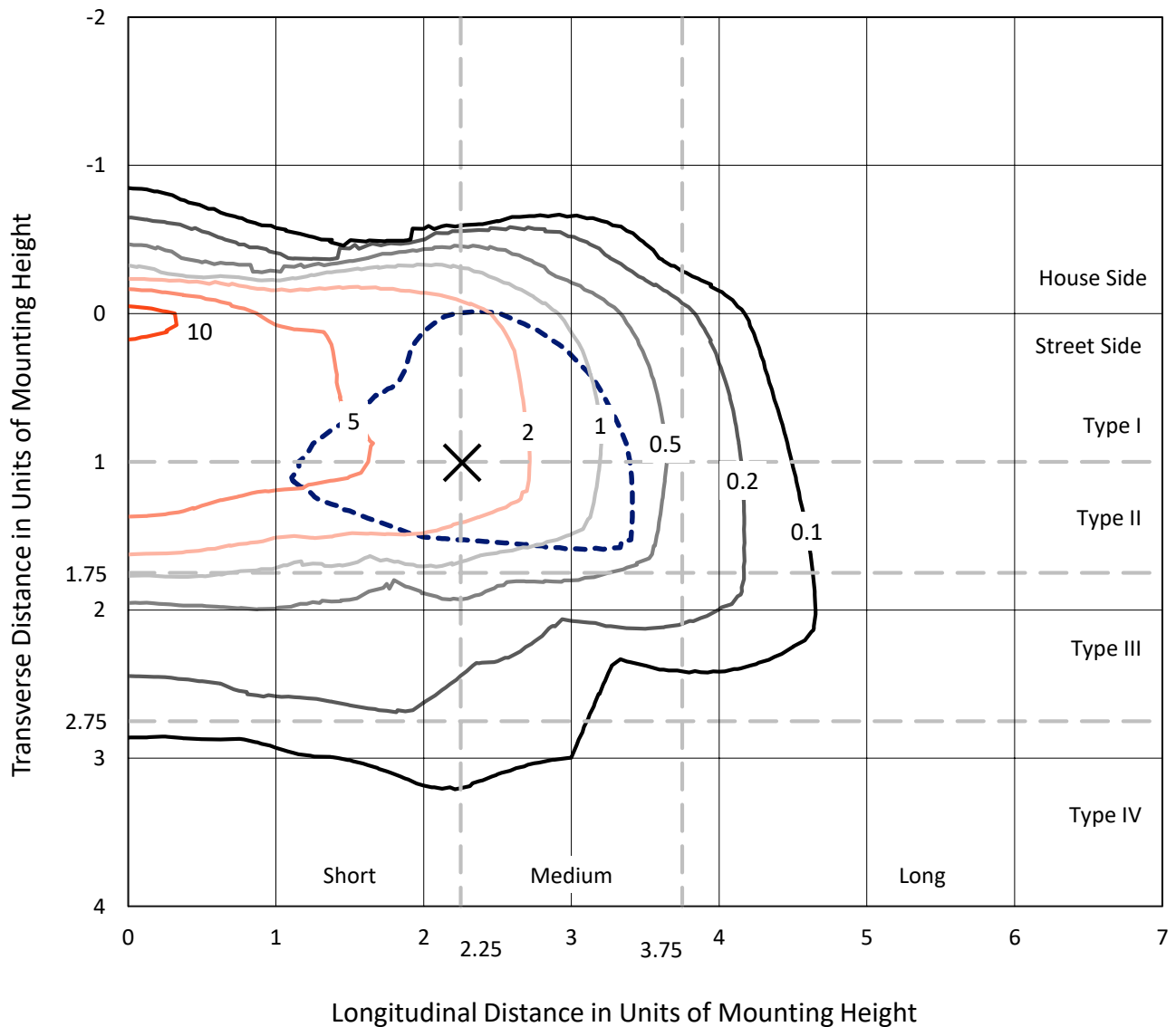


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

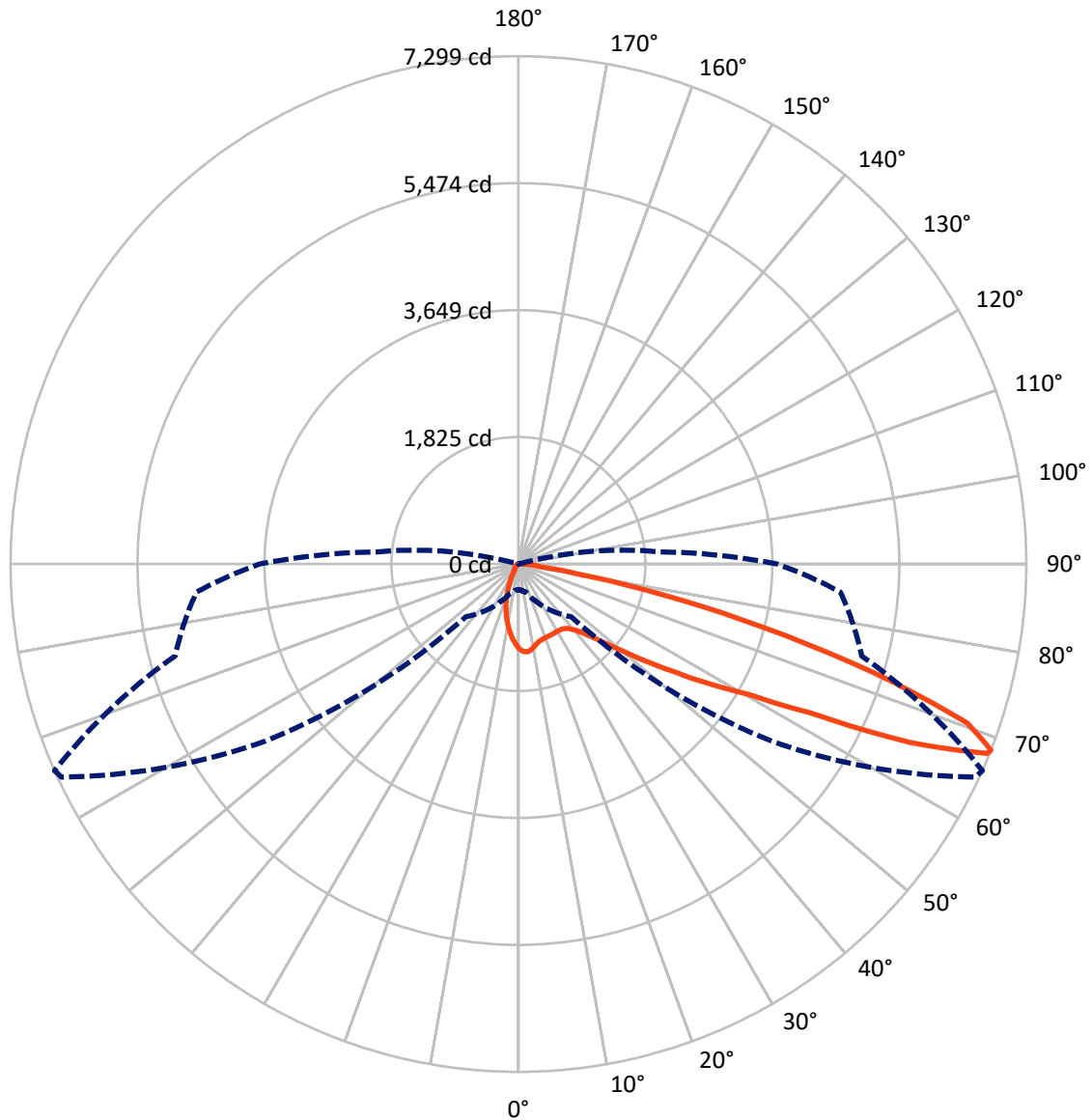


Based on 10 foot mounting height. Maximum calculated value = 12.2 fc  
 Type II - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

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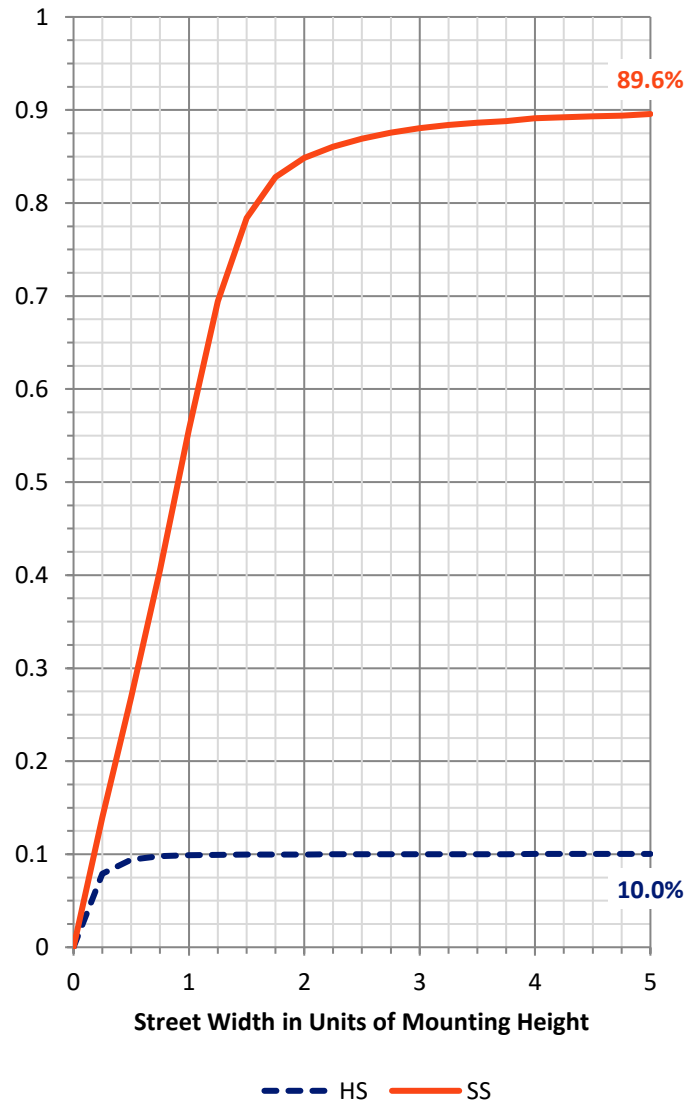
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 553.7    | 0.0    | 553.7  |
|                    | % Fixture | 10.1     | 0.0    | 10.1   |
| <b>Street Side</b> | Lumens    | 4913.2   | 0.0    | 4913.2 |
|                    | % Fixture | 89.9     | 0.0    | 89.9   |
| <b>Total</b>       | Lumens    | 5467.0   | 0.0    | 5467.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 99.8   | 1.8       |
| 10°-20°   | 214.8  | 3.9       |
| 20°-30°   | 311.3  | 5.7       |
| 30°-40°   | 476.6  | 8.7       |
| 40°-50°   | 815.1  | 14.9      |
| 50°-60°   | 1275.1 | 23.3      |
| 60°-70°   | 1468.3 | 26.9      |
| 70°-80°   | 734.7  | 13.4      |
| 80°-90°   | 71.2   | 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°    | 5467.0 | 100.0     |
| 0°-180°   | 5467.0 | 100.0     |



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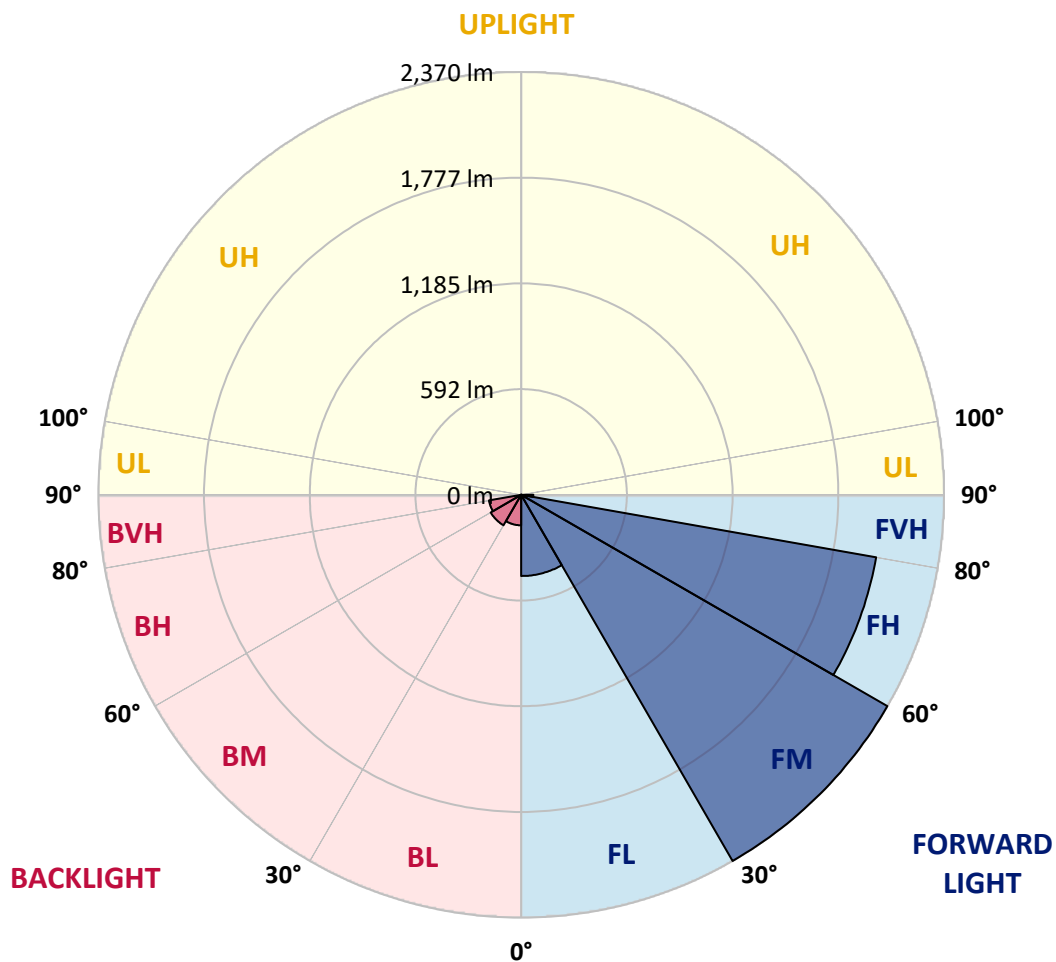
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 455.1  | 8.3       |                         |      |         |
| FM (30°-60°)   | 2369.7 | 43.3      |                         |      |         |
| FH (60°-80°)   | 2020.0 | 36.9      |                         |      | G2/5000 |
| FVH (80°-90°)  | 68.5   | 1.3       |                         |      | G1/100  |
| BL (0°-30°)    | 170.9  | 3.1       | B1/500                  |      |         |
| BM (30°-60°)   | 197.2  | 3.6       | B0/220                  |      |         |
| BH (60°-80°)   | 183.0  | 3.3       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 2.7    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 |
| 2.5°  | 1281.1 | 1281.9 | 1281.5 | 1282.8 | 1281.9 | 1275.5 | 1268.6 | 1254.0 | 1255.3 | 1236.5 | 1215.4 |
| 5°    | 1191.0 | 1198.3 | 1205.5 | 1212.8 | 1230.4 | 1245.9 | 1264.3 | 1268.6 | 1268.6 | 1252.3 | 1221.4 |
| 7.5°  | 1099.1 | 1099.5 | 1107.7 | 1117.6 | 1141.2 | 1169.5 | 1212.4 | 1251.0 | 1251.9 | 1256.2 | 1222.3 |
| 10°   | 1030.0 | 1032.2 | 1037.7 | 1048.5 | 1072.1 | 1100.0 | 1148.0 | 1208.6 | 1213.3 | 1245.0 | 1213.7 |
| 12.5° | 976.4  | 978.9  | 985.0  | 997.4  | 1018.9 | 1047.6 | 1098.3 | 1167.4 | 1173.8 | 1234.3 | 1211.1 |
| 15°   | 935.2  | 938.6  | 943.3  | 955.8  | 978.9  | 1009.4 | 1064.8 | 1139.9 | 1147.6 | 1230.0 | 1219.3 |
| 17.5° | 918.0  | 918.0  | 917.6  | 926.2  | 949.3  | 980.2  | 1038.2 | 1125.3 | 1135.2 | 1233.4 | 1233.0 |
| 20°   | 925.3  | 924.0  | 915.0  | 912.9  | 927.0  | 957.9  | 1017.1 | 1115.9 | 1127.0 | 1239.9 | 1249.8 |
| 22.5° | 963.9  | 961.3  | 941.2  | 924.4  | 920.1  | 940.7  | 1003.0 | 1109.4 | 1122.7 | 1253.2 | 1272.1 |
| 25°   | 1045.9 | 1038.2 | 1010.3 | 972.5  | 938.6  | 936.5  | 993.1  | 1106.0 | 1120.1 | 1268.6 | 1296.5 |
| 27.5° | 1152.3 | 1150.2 | 1105.6 | 1054.9 | 989.7  | 950.6  | 990.1  | 1103.4 | 1117.6 | 1279.8 | 1316.3 |
| 30°   | 1284.5 | 1285.4 | 1233.9 | 1167.8 | 1069.1 | 990.5  | 999.5  | 1102.1 | 1116.7 | 1280.7 | 1324.9 |
| 32.5° | 1421.0 | 1421.9 | 1378.9 | 1308.1 | 1177.7 | 1059.2 | 1026.2 | 1108.1 | 1121.4 | 1277.2 | 1324.4 |
| 35°   | 1552.3 | 1553.6 | 1527.9 | 1470.8 | 1322.7 | 1154.5 | 1076.4 | 1128.7 | 1138.2 | 1279.4 | 1323.6 |
| 37.5° | 1718.4 | 1723.6 | 1691.8 | 1638.6 | 1504.7 | 1294.4 | 1158.3 | 1170.4 | 1178.1 | 1297.0 | 1330.0 |
| 40°   | 2001.7 | 1994.8 | 1903.8 | 1813.7 | 1702.1 | 1464.8 | 1276.8 | 1242.0 | 1244.6 | 1342.5 | 1354.5 |
| 42.5° | 2331.7 | 2323.1 | 2167.3 | 2012.0 | 1905.1 | 1670.3 | 1428.3 | 1351.9 | 1351.5 | 1418.8 | 1407.7 |
| 45°   | 2615.8 | 2610.7 | 2446.7 | 2239.4 | 2130.0 | 1897.4 | 1615.0 | 1510.3 | 1505.1 | 1551.0 | 1504.7 |
| 47.5° | 2817.5 | 2813.2 | 2689.2 | 2481.5 | 2390.1 | 2147.2 | 1848.0 | 1726.1 | 1715.4 | 1724.0 | 1662.2 |
| 50°   | 2837.3 | 2832.5 | 2789.2 | 2655.7 | 2693.9 | 2513.7 | 2136.0 | 2009.0 | 1995.2 | 1981.9 | 1900.4 |
| 52.5° | 2652.7 | 2652.3 | 2675.0 | 2666.5 | 2906.8 | 2985.3 | 2489.2 | 2358.7 | 2342.4 | 2308.5 | 2227.4 |
| 55°   | 2275.5 | 2273.3 | 2359.6 | 2484.9 | 2902.1 | 3472.0 | 3027.8 | 2775.0 | 2753.6 | 2685.8 | 2579.3 |
| 57.5° | 1662.6 | 1651.5 | 1831.7 | 2097.4 | 2698.2 | 3684.9 | 3883.2 | 3292.2 | 3256.6 | 3041.6 | 2877.6 |
| 60°   | 918.0  | 922.3  | 1154.0 | 1468.6 | 2215.4 | 3642.8 | 4670.3 | 3895.2 | 3801.6 | 3348.4 | 3183.2 |
| 62.5° | 514.6  | 525.3  | 697.8  | 954.5  | 1412.4 | 3301.6 | 5092.6 | 4932.9 | 4707.6 | 3706.3 | 3569.4 |
| 65°   | 389.3  | 395.7  | 482.4  | 736.5  | 890.5  | 2307.2 | 5160.0 | 6384.0 | 6189.5 | 4248.8 | 4184.4 |
| 67.5° | 366.5  | 371.7  | 414.2  | 610.7  | 811.1  | 1196.5 | 4652.7 | 7242.3 | 7266.8 | 4988.7 | 4660.8 |
| 68°   | 369.1  | 375.5  | 418.0  | 587.5  | 809.9  | 1070.4 | 4436.4 | 7246.6 | 7298.5 | 5108.0 | 4644.5 |
| 70°   | 339.0  | 340.8  | 442.0  | 576.4  | 785.0  | 843.3  | 3209.4 | 6750.0 | 6843.2 | 5250.1 | 4216.2 |
| 72.5° | 129.6  | 130.0  | 198.3  | 499.1  | 822.3  | 848.0  | 1616.7 | 5335.1 | 5339.8 | 4569.0 | 3287.0 |
| 75°   | 67.4   | 56.7   | 62.2   | 156.2  | 785.4  | 826.6  | 811.1  | 3642.8 | 3620.1 | 3090.1 | 2014.1 |
| 77.5° | 46.4   | 39.5   | 41.6   | 54.1   | 326.6  | 826.2  | 585.8  | 2094.8 | 2090.1 | 1314.6 | 574.7  |
| 80°   | 26.2   | 22.7   | 24.9   | 45.5   | 114.6  | 775.5  | 545.9  | 900.4  | 848.5  | 230.9  | 93.1   |
| 82.5° | 13.3   | 11.2   | 13.3   | 38.2   | 71.2   | 488.0  | 530.9  | 353.2  | 314.6  | 54.9   | 60.5   |
| 85°   | 3.4    | 3.4    | 6.4    | 26.6   | 44.2   | 160.1  | 476.0  | 254.9  | 229.2  | 24.0   | 42.9   |
| 87.5° | 0.9    | 0.4    | 2.6    | 9.9    | 15.9   | 34.8   | 263.9  | 142.1  | 122.3  | 12.4   | 24.9   |
| 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 | 1218.0 |
| 2.5°  | 1206.8 | 1194.8 | 1171.2 | 1144.6 | 1125.7 | 1105.1 | 1093.1 | 1078.5 | 1067.4 | 1057.5 | 1064.8 |
| 5°    | 1202.5 | 1179.4 | 1127.0 | 1068.2 | 1018.9 | 971.7  | 936.5  | 903.0  | 877.7  | 861.8  | 868.2  |
| 7.5°  | 1191.4 | 1157.1 | 1072.1 | 980.2  | 899.5  | 823.6  | 761.8  | 706.4  | 663.5  | 640.3  | 647.6  |
| 10°   | 1172.5 | 1124.0 | 1009.8 | 882.4  | 769.5  | 662.2  | 570.4  | 488.0  | 425.7  | 396.6  | 403.4  |
| 12.5° | 1158.8 | 1094.8 | 945.5  | 788.0  | 639.5  | 487.1  | 365.2  | 270.8  | 222.3  | 193.1  | 195.7  |
| 15°   | 1152.8 | 1072.1 | 885.4  | 688.4  | 497.4  | 312.9  | 197.4  | 142.9  | 126.2  | 120.2  | 120.6  |
| 17.5° | 1153.6 | 1054.1 | 828.3  | 585.0  | 354.1  | 179.8  | 121.0  | 109.0  | 106.4  | 105.1  | 105.1  |
| 20°   | 1155.8 | 1036.0 | 769.1  | 477.2  | 226.6  | 115.9  | 100.9  | 97.0   | 95.7   | 94.0   | 94.4   |
| 22.5° | 1162.2 | 1022.3 | 709.4  | 369.1  | 139.5  | 94.4   | 89.3   | 85.8   | 83.7   | 81.1   | 81.5   |
| 25°   | 1172.1 | 1012.0 | 650.6  | 265.7  | 98.3   | 82.4   | 77.7   | 73.0   | 69.1   | 66.1   | 66.5   |
| 27.5° | 1178.1 | 997.4  | 588.0  | 181.1  | 81.5   | 72.1   | 65.7   | 59.2   | 54.9   | 52.4   | 51.9   |
| 30°   | 1173.8 | 973.8  | 516.7  | 118.9  | 72.1   | 62.2   | 54.5   | 47.2   | 42.9   | 40.8   | 40.8   |
| 32.5° | 1162.2 | 943.3  | 438.2  | 86.7   | 63.9   | 53.6   | 44.2   | 37.8   | 34.8   | 33.5   | 33.9   |
| 35°   | 1148.9 | 911.6  | 354.5  | 73.4   | 57.5   | 45.5   | 36.1   | 30.9   | 29.6   | 29.2   | 29.2   |
| 37.5° | 1141.6 | 884.1  | 274.2  | 66.5   | 51.5   | 37.8   | 29.6   | 26.6   | 25.3   | 25.3   | 25.3   |
| 40°   | 1149.8 | 863.1  | 203.0  | 61.4   | 45.5   | 31.3   | 24.9   | 22.7   | 22.3   | 22.3   | 22.3   |
| 42.5° | 1184.5 | 855.8  | 148.5  | 57.1   | 39.5   | 26.2   | 21.5   | 19.7   | 19.3   | 19.7   | 19.7   |
| 45°   | 1252.3 | 871.7  | 112.4  | 52.8   | 33.9   | 21.5   | 18.5   | 17.2   | 17.2   | 17.6   | 17.6   |
| 47.5° | 1367.3 | 912.4  | 92.3   | 48.5   | 28.3   | 18.0   | 15.9   | 15.0   | 15.0   | 15.5   | 15.5   |
| 50°   | 1545.9 | 988.0  | 82.8   | 43.8   | 23.6   | 15.5   | 13.3   | 12.9   | 12.9   | 13.3   | 13.7   |
| 52.5° | 1817.1 | 1131.7 | 78.1   | 39.1   | 19.3   | 12.9   | 11.2   | 10.7   | 11.2   | 11.6   | 11.6   |
| 55°   | 2118.8 | 1315.8 | 72.5   | 34.3   | 16.3   | 10.7   | 9.0    | 9.0    | 9.4    | 10.3   | 10.3   |
| 57.5° | 2399.9 | 1493.5 | 67.4   | 28.3   | 14.2   | 8.6    | 7.3    | 7.3    | 8.2    | 9.0    | 9.0    |
| 60°   | 2696.9 | 1667.8 | 60.5   | 22.7   | 12.0   | 6.9    | 6.0    | 6.0    | 7.3    | 8.2    | 8.6    |
| 62.5° | 3063.9 | 1870.3 | 51.5   | 18.0   | 9.4    | 5.2    | 4.3    | 5.6    | 6.9    | 8.2    | 8.2    |
| 65°   | 3594.3 | 2122.3 | 40.3   | 14.2   | 7.3    | 3.9    | 3.4    | 5.2    | 6.4    | 7.7    | 8.2    |
| 67.5° | 3787.0 | 2090.1 | 30.5   | 11.6   | 5.6    | 3.0    | 3.0    | 4.7    | 6.4    | 7.7    | 7.7    |
| 68°   | 3716.6 | 2019.7 | 29.2   | 11.2   | 5.2    | 3.0    | 3.0    | 4.7    | 6.4    | 7.7    | 7.7    |
| 70°   | 3238.5 | 1651.0 | 24.0   | 8.6    | 4.3    | 2.6    | 2.6    | 4.3    | 6.4    | 7.3    | 7.7    |
| 72.5° | 2424.8 | 1097.0 | 20.6   | 5.6    | 3.9    | 2.6    | 2.1    | 4.3    | 6.0    | 7.3    | 7.3    |
| 75°   | 1391.0 | 455.4  | 17.6   | 4.3    | 3.4    | 2.1    | 2.1    | 3.9    | 6.0    | 7.3    | 7.3    |
| 77.5° | 393.1  | 106.4  | 14.2   | 3.4    | 3.0    | 2.1    | 1.7    | 3.9    | 5.6    | 6.9    | 6.9    |
| 80°   | 72.1   | 31.8   | 11.2   | 3.0    | 2.6    | 2.1    | 1.7    | 3.9    | 5.6    | 6.9    | 6.9    |
| 82.5° | 47.6   | 15.0   | 8.2    | 3.0    | 2.6    | 2.1    | 1.7    | 3.4    | 5.2    | 6.4    | 6.4    |
| 85°   | 35.6   | 10.7   | 5.2    | 3.0    | 2.6    | 2.1    | 1.7    | 3.4    | 5.2    | 6.4    | 6.4    |
| 87.5° | 19.7   | 4.7    | 3.9    | 3.4    | 3.0    | 2.1    | 1.7    | 3.0    | 4.7    | 6.0    | 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    |

(END OF REPORT)