

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: P193507

Luminaire Tested: **GAN-AF-09-LED-U-AFL-8030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193507  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-09-LED-U-AFL-8030-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35992 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 374  
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

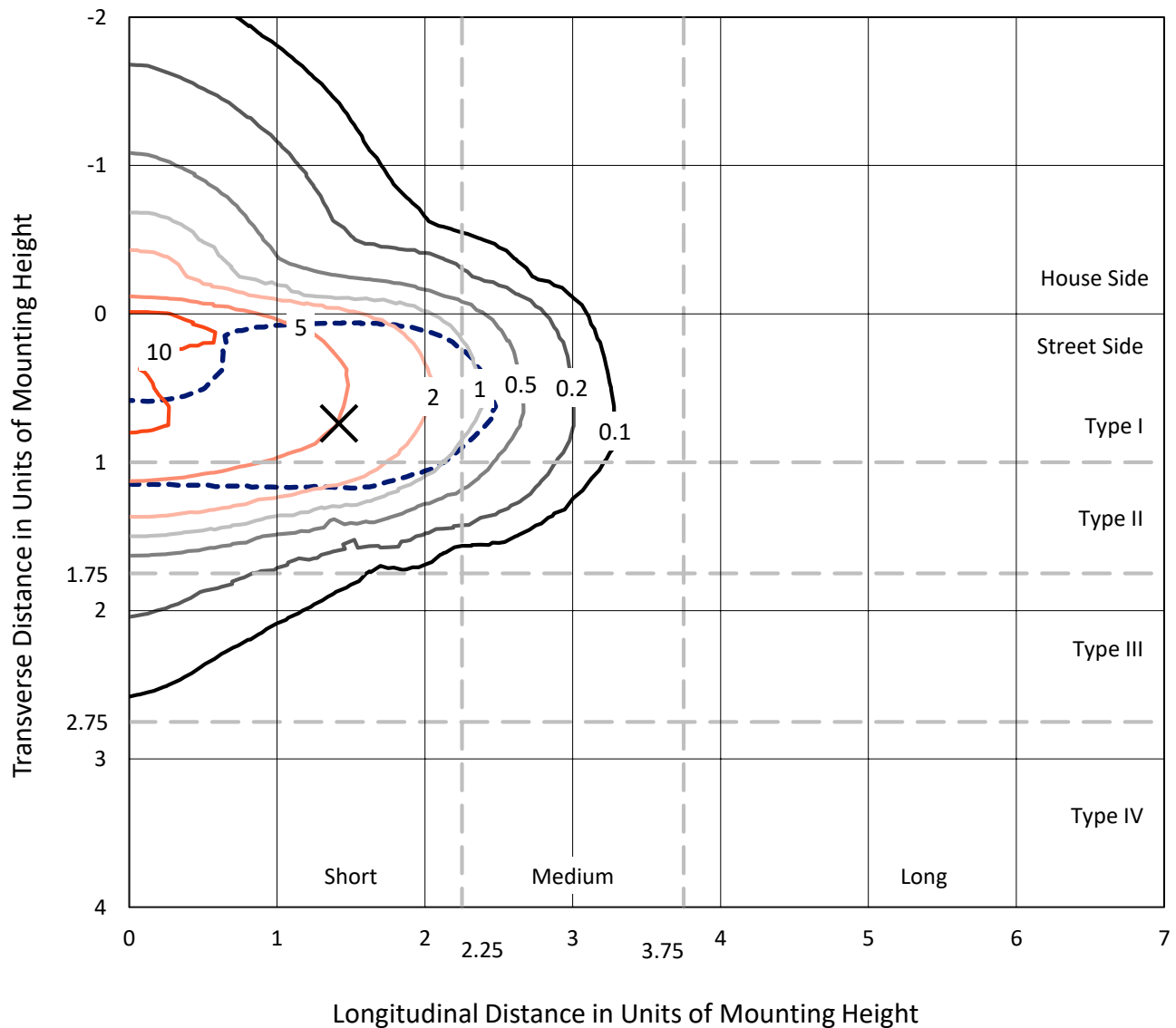


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

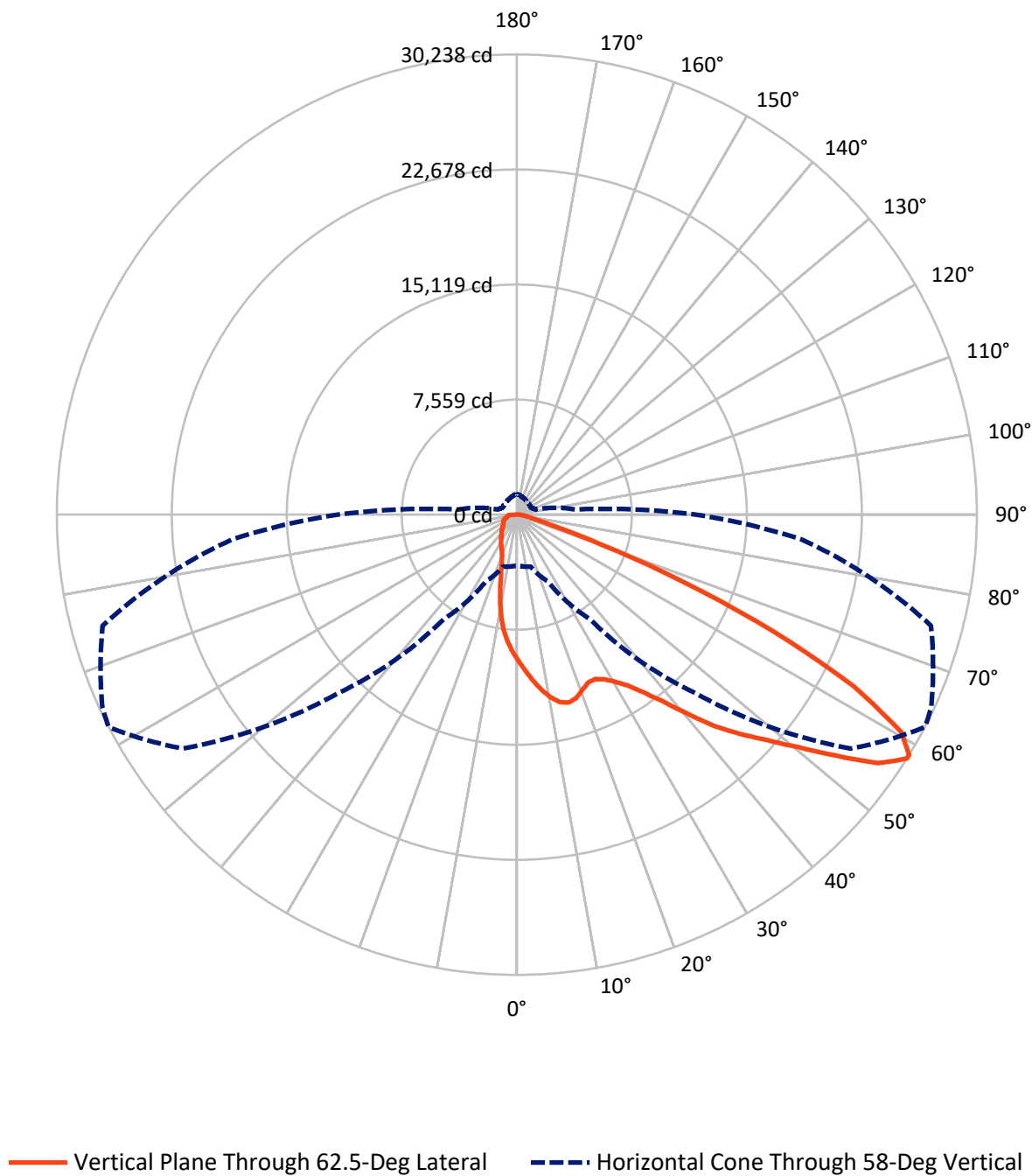


Based on 30 foot mounting height. Maximum calculated value = 12.9 fc  
 Type II - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5488.9   | 0.0    | 5488.9  |
|                    | % Fixture | 15.3     | 0.0    | 15.3    |
| <b>Street Side</b> | Lumens    | 30503.1  | 0.0    | 30503.1 |
|                    | % Fixture | 84.7     | 0.0    | 84.7    |
| <b>Total</b>       | Lumens    | 35992.0  | 0.0    | 35992.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 855.1   | 2.4       |
| 10°-20°   | 2185.6  | 6.1       |
| 20°-30°   | 3533.2  | 9.8       |
| 30°-40°   | 5608.9  | 15.6      |
| 40°-50°   | 8206.9  | 22.8      |
| 50°-60°   | 8583.8  | 23.8      |
| 60°-70°   | 5071.3  | 14.1      |
| 70°-80°   | 1428.6  | 4.0       |
| 80°-90°   | 518.7   | 1.4       |
| 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°    | 35992.0 | 100.0     |
| 0°-180°   | 35992.0 | 100.0     |

**Coefficient of Utilization**



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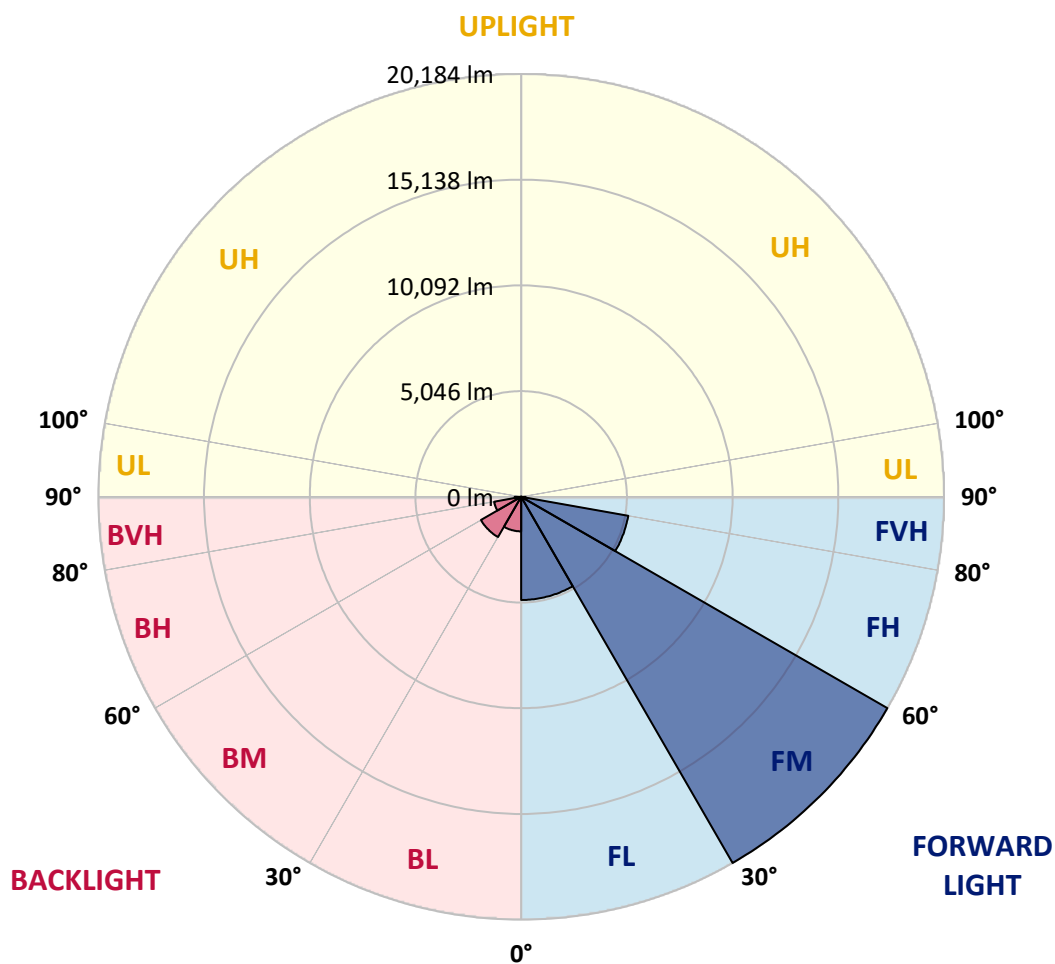
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 4924.2  | 13.7      |                         |      |         |
| FM   | (30°-60°)   | 20184.1 | 56.1      |                         |      |         |
| FH   | (60°-80°)   | 5190.2  | 14.4      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 204.6   | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1649.7  | 4.6       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 2215.5  | 6.2       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1309.7  | 3.6       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 314.0   | 0.9       |                         |      | G3/500  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 62.5°   | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 9560.5  | 9560.5  | 9560.5  | 9560.5  | 9560.5  | 9560.5  | 9560.5  | 9560.5  | 9560.5  | 9560.5  | 9560.5  |
| 2.5°  | 10924.9 | 10836.7 | 10780.8 | 10731.7 | 10667.3 | 10530.0 | 10345.2 | 10228.3 | 10169.0 | 9967.3  | 9728.3  |
| 5°    | 11996.0 | 11918.1 | 11860.4 | 11794.3 | 11679.1 | 11463.8 | 11165.5 | 10928.3 | 10811.3 | 10408.0 | 9930.0  |
| 7.5°  | 11745.2 | 11777.4 | 11877.4 | 12051.9 | 12201.1 | 12172.3 | 11906.2 | 11604.5 | 11450.3 | 10889.3 | 10163.9 |
| 10°   | 10233.4 | 10289.3 | 10462.2 | 10870.6 | 11531.6 | 12209.6 | 12416.3 | 12207.9 | 12051.9 | 11365.5 | 10404.6 |
| 12.5° | 9930.0  | 9928.3  | 9941.9  | 10050.3 | 10443.5 | 11397.7 | 12433.3 | 12643.4 | 12550.2 | 11819.8 | 10650.3 |
| 15°   | 10053.7 | 10057.1 | 10047.0 | 10092.7 | 10214.7 | 10592.7 | 11914.7 | 12811.2 | 12877.3 | 12277.4 | 10904.5 |
| 17.5° | 10379.1 | 10370.7 | 10331.7 | 10331.7 | 10375.8 | 10523.2 | 11304.5 | 12655.3 | 12960.4 | 12682.4 | 11128.3 |
| 20°   | 10924.9 | 10885.9 | 10782.5 | 10687.6 | 10640.1 | 10719.8 | 11053.7 | 12296.0 | 12816.3 | 13036.6 | 11313.0 |
| 22.5° | 11585.9 | 11555.4 | 11387.6 | 11184.2 | 11019.8 | 11018.1 | 11182.5 | 11982.5 | 12567.2 | 13370.5 | 11468.9 |
| 25°   | 12440.1 | 12390.9 | 12141.8 | 11816.4 | 11528.2 | 11418.1 | 11463.8 | 11967.2 | 12431.6 | 13733.2 | 11607.9 |
| 27.5° | 13443.4 | 13353.6 | 13058.7 | 12589.2 | 12165.5 | 11943.5 | 11877.4 | 12243.5 | 12555.3 | 14182.3 | 11801.1 |
| 30°   | 14660.3 | 14556.9 | 14179.0 | 13567.1 | 12968.8 | 12604.5 | 12463.8 | 12733.3 | 12965.5 | 14729.8 | 12111.3 |
| 32.5° | 16045.0 | 15895.8 | 15458.6 | 14784.0 | 13997.6 | 13441.7 | 13212.9 | 13380.7 | 13565.4 | 15389.1 | 12499.4 |
| 35°   | 17958.4 | 17780.5 | 17148.3 | 16217.8 | 15329.7 | 14565.4 | 14199.3 | 14321.3 | 14501.0 | 16372.1 | 13060.4 |
| 37.5° | 19263.4 | 19183.8 | 18763.5 | 17888.9 | 16922.9 | 16043.3 | 15477.2 | 15548.4 | 15650.1 | 17600.8 | 13779.0 |
| 40°   | 19251.6 | 19283.8 | 19292.3 | 19300.7 | 18643.1 | 17800.8 | 17192.4 | 17117.8 | 17097.5 | 18949.9 | 14595.9 |
| 42.5° | 18287.2 | 18419.4 | 18846.5 | 19712.6 | 20112.6 | 19726.1 | 19168.5 | 18953.3 | 18846.5 | 20539.7 | 15461.9 |
| 45°   | 16811.0 | 16882.2 | 17682.2 | 19373.6 | 20865.1 | 21632.8 | 21210.8 | 20532.9 | 20339.7 | 22000.6 | 16180.6 |
| 47.5° | 16050.0 | 16128.0 | 16631.4 | 18475.4 | 20856.6 | 23173.4 | 23417.5 | 22126.0 | 21780.3 | 23271.7 | 16800.9 |
| 50°   | 14238.3 | 14401.0 | 15034.8 | 16912.7 | 20095.6 | 23881.9 | 25724.1 | 24024.2 | 23309.0 | 24509.0 | 17422.9 |
| 52.5° | 10911.3 | 11162.2 | 11872.3 | 14343.4 | 18165.2 | 23531.0 | 27569.8 | 26325.8 | 25315.7 | 25790.2 | 17956.7 |
| 55°   | 6882.7  | 7069.1  | 7665.7  | 10130.0 | 14531.5 | 21705.7 | 28269.8 | 28815.5 | 27917.3 | 27003.7 | 18419.4 |
| 57.5° | 3742.2  | 3825.2  | 4049.0  | 5592.9  | 9452.1  | 17670.3 | 27249.5 | 30232.4 | 29859.5 | 28034.2 | 18768.6 |
| 58°   | 3349.0  | 3404.9  | 3543.9  | 4847.2  | 8382.6  | 16567.0 | 26797.0 | 30237.5 | 30051.0 | 28185.0 | 18795.7 |
| 60°   | 2484.6  | 2455.8  | 2332.1  | 2766.0  | 4665.9  | 11445.2 | 24061.5 | 29027.4 | 29574.8 | 28369.8 | 18663.5 |
| 62.5° | 2182.9  | 2113.5  | 1860.9  | 1832.1  | 2269.4  | 5272.6  | 18410.9 | 24864.9 | 26158.0 | 27315.6 | 17860.1 |
| 65°   | 2050.7  | 1976.2  | 1650.8  | 1545.7  | 1637.2  | 2230.4  | 10845.2 | 18648.2 | 20270.2 | 24119.1 | 15806.0 |
| 67.5° | 1952.4  | 1855.8  | 1516.9  | 1372.8  | 1379.6  | 1474.5  | 4347.2  | 11745.2 | 13570.5 | 18312.6 | 12294.3 |
| 70°   | 1857.5  | 1752.5  | 1403.3  | 1237.2  | 1198.2  | 1166.0  | 1728.7  | 5879.4  | 7535.2  | 11567.2 | 7838.6  |
| 72.5° | 1755.8  | 1652.5  | 1303.3  | 1130.5  | 1054.2  | 947.4   | 1128.8  | 2405.0  | 3359.2  | 5472.6  | 3555.8  |
| 75°   | 1608.4  | 1515.2  | 1203.3  | 1035.5  | 927.1   | 784.7   | 852.5   | 1255.9  | 1506.7  | 2179.6  | 1713.5  |
| 77.5° | 1427.0  | 1350.8  | 1091.5  | 957.6   | 822.0   | 637.3   | 655.9   | 871.1   | 966.1   | 1247.4  | 1018.6  |
| 80°   | 1025.4  | 1052.5  | 971.1   | 861.0   | 732.2   | 516.9   | 503.4   | 635.6   | 686.4   | 801.7   | 662.7   |
| 82.5° | 720.3   | 735.6   | 803.3   | 703.4   | 605.1   | 406.8   | 371.2   | 447.4   | 477.9   | 527.1   | 357.6   |
| 85°   | 496.6   | 479.6   | 550.8   | 489.8   | 437.3   | 271.2   | 254.2   | 303.4   | 322.0   | 327.1   | 184.7   |
| 87.5° | 298.3   | 298.3   | 318.6   | 262.7   | 235.6   | 140.7   | 137.3   | 172.9   | 184.7   | 176.3   | 101.7   |
| 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):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 9560.5  | 9560.5 | 9560.5 | 9560.5 | 9560.5 | 9560.5 | 9560.5 | 9560.5 | 9560.5 | 9560.5 | 9560.5 |
| 2.5°  | 9586.0  | 9465.6 | 9209.7 | 9004.6 | 8745.3 | 8475.8 | 8325.0 | 8164.0 | 8053.8 | 7974.2 | 8101.3 |
| 5°    | 9658.8  | 9413.1 | 8884.3 | 8382.6 | 7828.4 | 7252.2 | 6814.9 | 6408.2 | 6125.1 | 5948.9 | 6115.0 |
| 7.5°  | 9774.1  | 9396.1 | 8553.8 | 7696.2 | 6701.4 | 5742.1 | 4884.5 | 4347.2 | 4033.7 | 3879.5 | 3976.1 |
| 10°   | 9906.3  | 9369.0 | 8165.7 | 6765.8 | 5342.1 | 4133.7 | 3493.0 | 3276.1 | 3204.9 | 3176.1 | 3189.7 |
| 12.5° | 10016.5 | 9311.4 | 7689.4 | 5640.4 | 4011.7 | 3264.2 | 3079.5 | 3074.4 | 3089.7 | 3093.1 | 3098.2 |
| 15°   | 10094.4 | 9226.7 | 6982.7 | 4467.6 | 3208.3 | 2974.4 | 2964.3 | 2994.8 | 3023.6 | 3035.4 | 3042.2 |
| 17.5° | 10147.0 | 9052.1 | 6184.4 | 3532.0 | 2874.4 | 2833.8 | 2857.5 | 2896.5 | 2927.0 | 2935.4 | 2942.2 |
| 20°   | 10141.9 | 8796.2 | 5233.6 | 2945.6 | 2693.1 | 2693.1 | 2733.8 | 2764.3 | 2766.0 | 2755.8 | 2760.9 |
| 22.5° | 10089.3 | 8445.3 | 4311.7 | 2633.8 | 2532.1 | 2560.9 | 2601.6 | 2572.8 | 2454.1 | 2376.2 | 2381.2 |
| 25°   | 10001.2 | 8026.7 | 3521.9 | 2435.5 | 2382.9 | 2433.8 | 2421.9 | 2205.0 | 2035.5 | 1959.2 | 1959.2 |
| 27.5° | 9923.2  | 7531.8 | 2915.1 | 2262.6 | 2233.8 | 2296.5 | 2086.3 | 1889.7 | 1818.6 | 1783.0 | 1771.1 |
| 30°   | 9867.3  | 6998.0 | 2510.0 | 2096.5 | 2093.1 | 2047.4 | 1810.1 | 1755.8 | 1744.0 | 1715.2 | 1705.0 |
| 32.5° | 9880.9  | 6457.3 | 2250.7 | 1950.8 | 1962.6 | 1752.5 | 1677.9 | 1689.7 | 1679.6 | 1649.1 | 1635.5 |
| 35°   | 9992.7  | 5943.8 | 2081.3 | 1818.6 | 1783.0 | 1583.0 | 1599.9 | 1622.0 | 1618.6 | 1576.2 | 1562.6 |
| 37.5° | 10192.7 | 5457.4 | 1969.4 | 1708.4 | 1555.9 | 1498.2 | 1525.3 | 1559.2 | 1550.8 | 1522.0 | 1511.8 |
| 40°   | 10402.9 | 4999.8 | 1877.9 | 1622.0 | 1422.0 | 1440.6 | 1464.3 | 1483.0 | 1491.5 | 1499.9 | 1493.1 |
| 42.5° | 10607.9 | 4521.8 | 1766.0 | 1533.8 | 1366.0 | 1386.4 | 1396.5 | 1415.2 | 1460.9 | 1493.1 | 1491.5 |
| 45°   | 10730.0 | 4072.7 | 1650.8 | 1408.4 | 1322.0 | 1333.8 | 1327.1 | 1364.3 | 1420.3 | 1472.8 | 1474.5 |
| 47.5° | 10865.6 | 3723.5 | 1559.2 | 1293.2 | 1279.6 | 1288.1 | 1267.7 | 1305.0 | 1355.9 | 1420.3 | 1427.0 |
| 50°   | 11030.0 | 3515.1 | 1486.4 | 1201.6 | 1222.0 | 1222.0 | 1216.9 | 1250.8 | 1322.0 | 1396.5 | 1410.1 |
| 52.5° | 11216.4 | 3474.4 | 1425.4 | 1135.5 | 1164.3 | 1162.7 | 1167.7 | 1218.6 | 1296.5 | 1369.4 | 1381.3 |
| 55°   | 11443.5 | 3584.6 | 1359.3 | 1086.4 | 1108.4 | 1115.2 | 1132.1 | 1189.8 | 1255.9 | 1338.9 | 1344.0 |
| 57.5° | 11707.9 | 3808.3 | 1306.7 | 1047.4 | 1057.6 | 1079.6 | 1106.7 | 1159.3 | 1230.4 | 1322.0 | 1327.1 |
| 58°   | 11752.0 | 3855.7 | 1298.2 | 1044.0 | 1047.4 | 1072.8 | 1103.3 | 1154.2 | 1225.4 | 1325.4 | 1330.4 |
| 60°   | 11753.7 | 4013.4 | 1279.6 | 1028.8 | 1008.4 | 1050.8 | 1084.7 | 1135.5 | 1216.9 | 1337.2 | 1349.1 |
| 62.5° | 11336.7 | 4011.7 | 1266.0 | 1006.7 | 967.7  | 1020.3 | 1059.3 | 1118.6 | 1208.4 | 1366.0 | 1389.8 |
| 65°   | 9982.6  | 3645.6 | 1201.6 | 972.8  | 935.5  | 993.2  | 1037.2 | 1106.7 | 1232.1 | 1491.5 | 1506.7 |
| 67.5° | 7808.1  | 2988.0 | 1081.3 | 925.4  | 893.2  | 966.1  | 1023.7 | 1105.0 | 1257.6 | 1520.3 | 1530.4 |
| 70°   | 5162.5  | 2235.5 | 949.1  | 871.1  | 849.1  | 933.9  | 1030.5 | 1162.7 | 1228.8 | 1459.2 | 1432.1 |
| 72.5° | 2679.5  | 1569.4 | 842.3  | 803.3  | 798.3  | 905.0  | 1128.8 | 1155.9 | 1199.9 | 1372.8 | 1338.9 |
| 75°   | 1406.7  | 1089.8 | 749.1  | 728.8  | 737.3  | 898.3  | 1332.1 | 1125.4 | 1162.7 | 1313.5 | 1377.9 |
| 77.5° | 861.0   | 879.6  | 669.5  | 661.0  | 677.9  | 877.9  | 1330.4 | 1086.4 | 1108.4 | 1208.4 | 1279.6 |
| 80°   | 576.2   | 713.5  | 608.4  | 610.1  | 622.0  | 803.3  | 1194.9 | 1025.4 | 1042.3 | 1142.3 | 1215.2 |
| 82.5° | 364.4   | 422.0  | 552.5  | 581.3  | 566.1  | 662.7  | 1015.2 | 933.9  | 957.6  | 1306.7 | 1381.3 |
| 85°   | 184.7   | 264.4  | 479.6  | 559.3  | 510.1  | 464.4  | 823.7  | 818.6  | 830.5  | 942.3  | 984.7  |
| 87.5° | 84.7    | 145.8  | 374.6  | 488.1  | 384.7  | 289.8  | 598.3  | 606.7  | 654.2  | 669.5  | 669.5  |
| 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)