

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: P322147

Luminaire Tested: **GAN-SA3A-727-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P322147  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA3A-727-U-T3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8671 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 96  
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: 24 FT



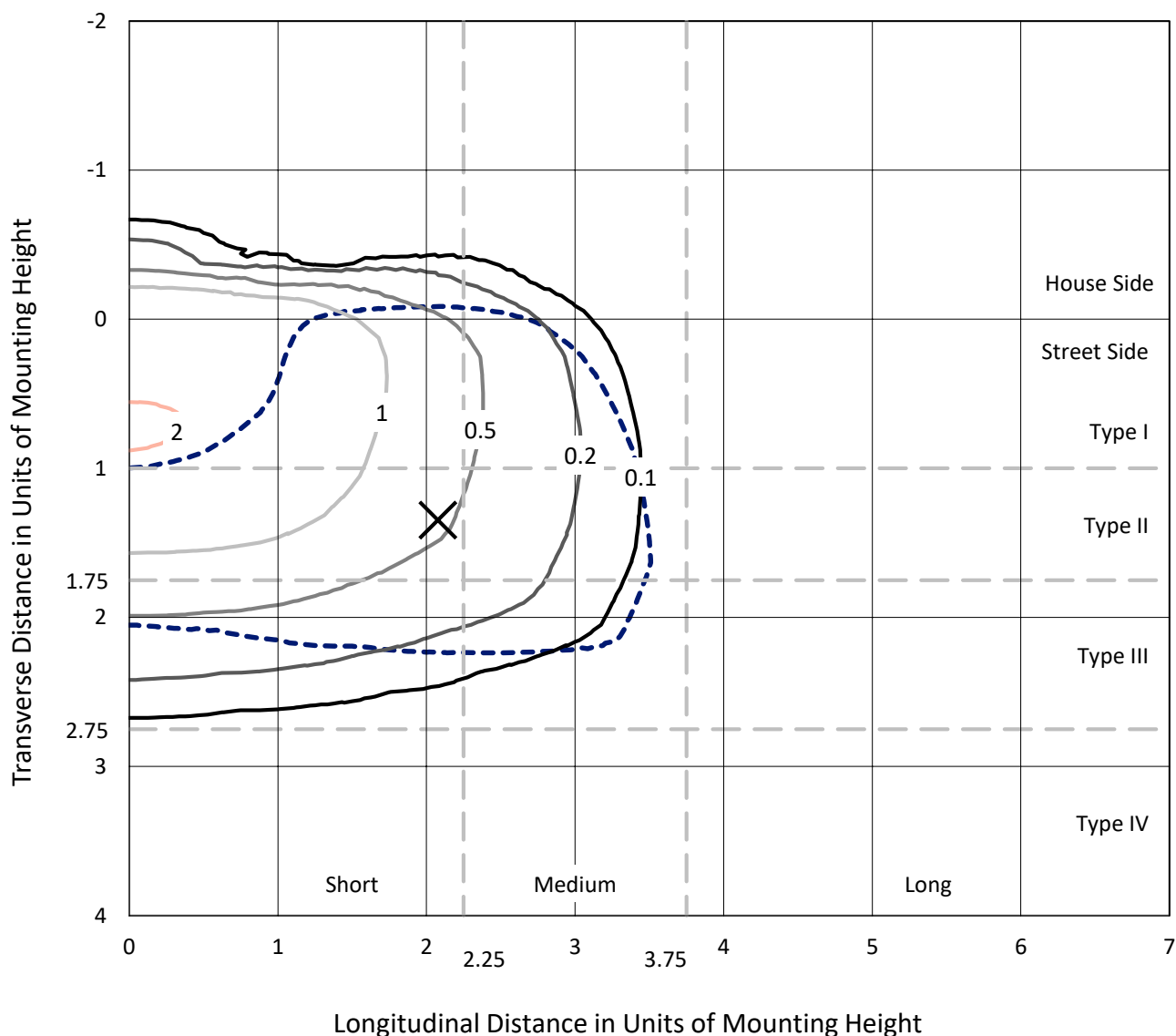
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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

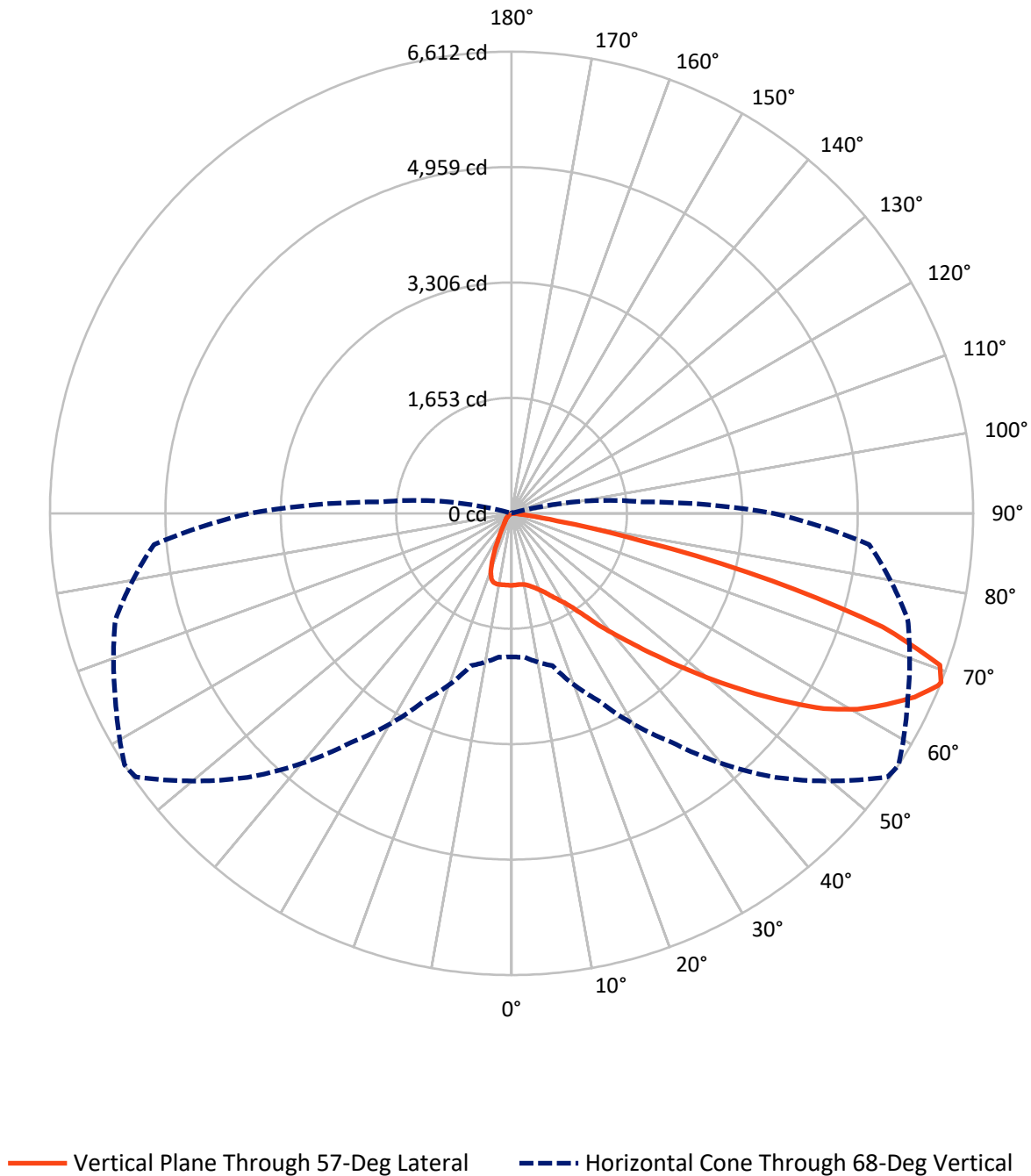
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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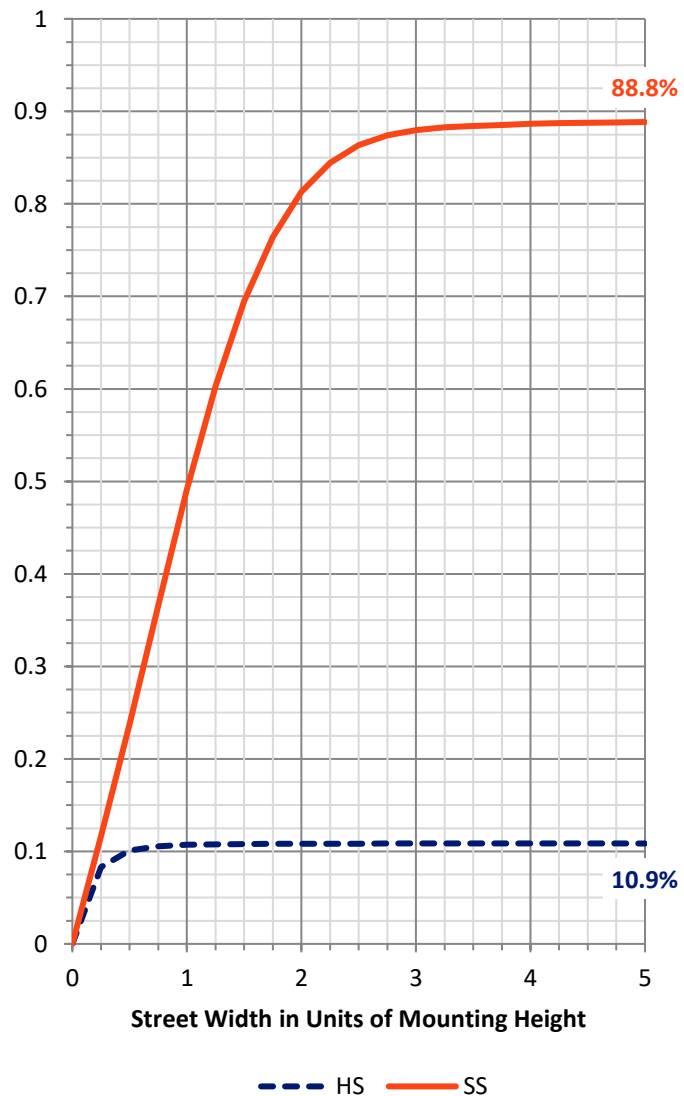
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 950.8    | 0.0    | 950.8  |
|                    | % Fixture | 11.0     | 0.0    | 11.0   |
| <b>Street Side</b> | Lumens    | 7720.2   | 0.0    | 7720.2 |
|                    | % Fixture | 89.0     | 0.0    | 89.0   |
| <b>Total</b>       | Lumens    | 8671.0   | 0.0    | 8671.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 96.4   | 1.1       |
| 10°-20°   | 267.2  | 3.1       |
| 20°-30°   | 460.9  | 5.3       |
| 30°-40°   | 795.6  | 9.2       |
| 40°-50°   | 1360.8 | 15.7      |
| 50°-60°   | 2177.2 | 25.1      |
| 60°-70°   | 2515.5 | 29.0      |
| 70°-80°   | 961.2  | 11.1      |
| 80°-90°   | 36.0   | 0.4       |
| 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°    | 8671.0 | 100.0     |
| 0°-180°   | 8671.0 | 100.0     |

**Coefficient of Utilization**



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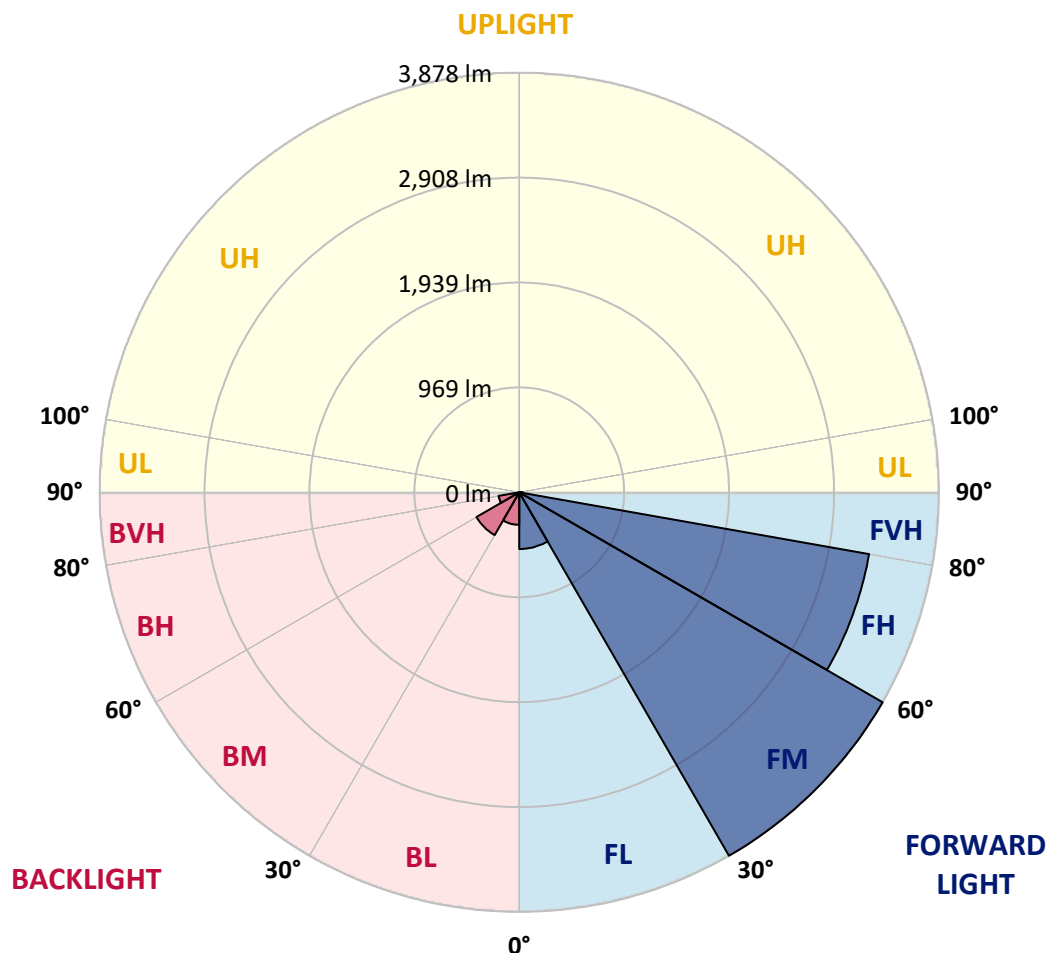
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 524.1  | 6.0       |                         |      |         |
| FM   | (30°-60°)   | 3877.6 | 44.7      |                         |      |         |
| FH   | (60°-80°)   | 3283.1 | 37.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 35.4   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 300.5  | 3.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 456.0  | 5.3       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 193.6  | 2.2       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 0.7    | 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 III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 57°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 |
| 2.5°  | 1006.2 | 1010.7 | 1013.9 | 1016.0 | 1018.5 | 1023.8 | 1025.4 | 1027.9 | 1029.1 | 1029.1 | 1032.0 |
| 5°    | 966.4  | 971.3  | 978.3  | 984.0  | 995.5  | 1010.3 | 1020.9 | 1025.0 | 1032.4 | 1039.0 | 1042.6 |
| 7.5°  | 929.5  | 935.2  | 943.4  | 957.0  | 976.6  | 1000.4 | 1022.6 | 1028.3 | 1042.6 | 1056.6 | 1063.6 |
| 10°   | 905.7  | 910.2  | 920.9  | 940.1  | 966.0  | 999.2  | 1030.3 | 1037.3 | 1061.9 | 1085.3 | 1098.4 |
| 12.5° | 897.5  | 901.6  | 912.7  | 934.4  | 966.4  | 1005.3 | 1048.4 | 1058.6 | 1094.7 | 1128.7 | 1147.2 |
| 15°   | 909.4  | 910.2  | 922.1  | 942.6  | 974.2  | 1020.5 | 1078.3 | 1090.6 | 1136.1 | 1180.4 | 1203.4 |
| 17.5° | 955.3  | 951.6  | 957.8  | 966.8  | 991.8  | 1040.6 | 1109.9 | 1128.3 | 1189.0 | 1241.1 | 1262.8 |
| 20°   | 1070.1 | 1070.1 | 1056.2 | 1031.6 | 1032.0 | 1071.8 | 1152.5 | 1173.4 | 1247.6 | 1307.9 | 1327.6 |
| 22.5° | 1266.5 | 1262.8 | 1234.9 | 1174.7 | 1119.3 | 1125.5 | 1204.6 | 1231.7 | 1318.2 | 1382.5 | 1389.1 |
| 25°   | 1502.7 | 1498.2 | 1455.1 | 1370.2 | 1274.3 | 1212.4 | 1275.1 | 1306.3 | 1402.2 | 1459.2 | 1445.7 |
| 27.5° | 1752.8 | 1749.1 | 1706.4 | 1601.1 | 1464.5 | 1351.0 | 1359.2 | 1388.7 | 1487.9 | 1544.1 | 1501.0 |
| 30°   | 1995.1 | 1996.3 | 1954.1 | 1845.8 | 1691.3 | 1527.7 | 1465.8 | 1483.0 | 1571.1 | 1628.1 | 1566.6 |
| 32.5° | 2225.5 | 2227.1 | 2190.7 | 2069.7 | 1925.4 | 1733.1 | 1613.4 | 1608.9 | 1667.9 | 1724.1 | 1653.6 |
| 35°   | 2430.9 | 2435.0 | 2410.0 | 2316.1 | 2163.2 | 1961.9 | 1804.8 | 1794.2 | 1805.3 | 1868.8 | 1786.8 |
| 37.5° | 2629.0 | 2631.4 | 2612.6 | 2533.4 | 2405.5 | 2213.2 | 2046.7 | 2031.6 | 2007.8 | 2056.6 | 1962.7 |
| 40°   | 2845.8 | 2839.7 | 2818.0 | 2746.2 | 2636.3 | 2490.8 | 2306.7 | 2280.4 | 2239.0 | 2282.5 | 2193.9 |
| 42.5° | 3047.6 | 3040.6 | 3044.3 | 2963.1 | 2870.4 | 2776.1 | 2609.7 | 2564.6 | 2540.4 | 2590.4 | 2477.7 |
| 45°   | 3299.7 | 3296.0 | 3308.3 | 3237.8 | 3162.8 | 3094.3 | 2957.0 | 2907.8 | 2897.1 | 2955.7 | 2820.8 |
| 47.5° | 3548.6 | 3557.6 | 3595.7 | 3565.8 | 3535.5 | 3475.2 | 3324.7 | 3302.6 | 3309.2 | 3380.1 | 3182.9 |
| 50°   | 3756.1 | 3766.7 | 3871.3 | 3905.7 | 3949.6 | 3914.3 | 3763.4 | 3749.9 | 3775.7 | 3839.7 | 3572.4 |
| 52.5° | 3906.1 | 3927.9 | 4057.8 | 4216.5 | 4376.4 | 4400.2 | 4249.7 | 4237.4 | 4272.3 | 4282.1 | 3873.3 |
| 55°   | 4010.3 | 4029.5 | 4176.7 | 4467.0 | 4792.6 | 4895.1 | 4801.6 | 4754.0 | 4747.5 | 4650.3 | 4189.8 |
| 57.5° | 4028.7 | 4026.7 | 4238.2 | 4629.0 | 5118.9 | 5383.4 | 5324.3 | 5277.6 | 5143.1 | 4990.6 | 4552.7 |
| 60°   | 3924.6 | 3936.5 | 4182.1 | 4685.1 | 5323.9 | 5752.8 | 5757.3 | 5696.6 | 5487.1 | 5321.5 | 4904.5 |
| 62.5° | 3603.9 | 3652.3 | 3900.4 | 4537.9 | 5321.5 | 5901.6 | 6074.6 | 6028.3 | 5777.8 | 5592.5 | 5261.2 |
| 65°   | 3084.1 | 3101.3 | 3337.9 | 4033.6 | 4961.9 | 5839.3 | 6360.4 | 6343.2 | 6039.8 | 5855.7 | 5444.5 |
| 67.5° | 2252.2 | 2214.8 | 2463.3 | 3176.3 | 4200.9 | 5476.0 | 6565.4 | 6587.1 | 6241.9 | 5909.8 | 5249.3 |
| 68°   | 2055.4 | 2066.4 | 2259.9 | 2964.3 | 4001.7 | 5347.7 | 6578.9 | 6612.2 | 6262.0 | 5874.6 | 5142.7 |
| 70°   | 1225.1 | 1246.4 | 1419.0 | 2041.0 | 3044.3 | 4621.6 | 6433.0 | 6508.8 | 6142.3 | 5510.9 | 4448.1 |
| 72.5° | 312.8  | 338.3  | 501.4  | 913.5  | 1738.8 | 3256.3 | 5430.5 | 5558.9 | 5332.9 | 4470.7 | 3002.9 |
| 75°   | 128.7  | 135.3  | 179.2  | 300.9  | 647.8  | 1467.0 | 3579.3 | 3854.1 | 3697.0 | 2676.5 | 1357.1 |
| 77.5° | 89.0   | 93.5   | 115.2  | 166.9  | 280.4  | 497.3  | 1754.8 | 1953.3 | 1759.7 | 913.5  | 296.0  |
| 80°   | 64.0   | 67.7   | 82.4   | 111.1  | 161.1  | 177.5  | 572.0  | 661.3  | 525.2  | 200.5  | 73.4   |
| 82.5° | 38.1   | 41.0   | 61.5   | 79.1   | 98.0   | 84.9   | 142.3  | 161.5  | 152.1  | 99.6   | 32.8   |
| 85°   | 18.9   | 22.1   | 41.4   | 56.6   | 52.9   | 35.7   | 43.5   | 48.4   | 59.9   | 60.7   | 17.6   |
| 87.5° | 1.2    | 2.5    | 24.2   | 34.0   | 14.8   | 8.2    | 12.7   | 15.6   | 21.3   | 29.9   | 7.4    |
| 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 | 1030.3 |
| 2.5°  | 1033.2 | 1033.6 | 1030.8 | 1029.5 | 1030.3 | 1025.4 | 1023.4 | 1024.2 | 1024.2 | 1025.4 | 1023.4 |
| 5°    | 1043.5 | 1043.5 | 1038.5 | 1032.0 | 1028.3 | 1018.9 | 1012.7 | 1011.1 | 1009.8 | 1009.0 | 1007.4 |
| 7.5°  | 1065.6 | 1063.1 | 1054.5 | 1040.2 | 1027.9 | 1007.4 | 991.8  | 983.6  | 979.5  | 977.9  | 976.6  |
| 10°   | 1101.3 | 1096.8 | 1082.4 | 1055.8 | 1027.5 | 991.0  | 957.0  | 932.8  | 912.7  | 904.5  | 899.6  |
| 12.5° | 1149.2 | 1142.7 | 1118.5 | 1074.2 | 1024.6 | 957.4  | 883.6  | 812.6  | 746.6  | 719.6  | 706.0  |
| 15°   | 1204.6 | 1195.2 | 1157.0 | 1089.8 | 1007.8 | 881.5  | 721.2  | 597.0  | 505.5  | 471.1  | 456.3  |
| 17.5° | 1260.8 | 1248.5 | 1190.7 | 1099.6 | 957.4  | 724.5  | 505.9  | 382.1  | 321.0  | 304.6  | 298.9  |
| 20°   | 1317.3 | 1299.3 | 1219.8 | 1092.3 | 843.4  | 522.3  | 333.7  | 279.2  | 261.6  | 256.7  | 255.0  |
| 22.5° | 1371.1 | 1343.2 | 1246.0 | 1063.6 | 667.9  | 350.6  | 264.0  | 246.8  | 241.1  | 238.2  | 237.4  |
| 25°   | 1417.8 | 1378.8 | 1269.0 | 975.0  | 472.7  | 264.9  | 237.8  | 232.1  | 224.7  | 219.4  | 219.8  |
| 27.5° | 1461.7 | 1414.5 | 1282.9 | 829.0  | 315.3  | 226.3  | 220.2  | 212.4  | 198.9  | 191.1  | 191.1  |
| 30°   | 1514.6 | 1462.1 | 1293.2 | 638.0  | 232.1  | 200.1  | 195.2  | 183.3  | 164.8  | 154.6  | 154.6  |
| 32.5° | 1594.1 | 1534.2 | 1286.6 | 447.7  | 192.3  | 175.9  | 164.4  | 148.0  | 127.9  | 118.1  | 117.7  |
| 35°   | 1715.9 | 1645.8 | 1239.9 | 293.6  | 169.7  | 152.9  | 134.5  | 114.4  | 96.8   | 88.6   | 88.2   |
| 37.5° | 1879.9 | 1795.0 | 1134.9 | 209.9  | 152.1  | 131.6  | 109.5  | 87.3   | 74.2   | 68.9   | 68.5   |
| 40°   | 2092.7 | 1968.4 | 984.8  | 170.2  | 135.7  | 111.1  | 84.5   | 67.7   | 58.6   | 54.5   | 54.9   |
| 42.5° | 2348.1 | 2154.2 | 804.8  | 146.8  | 119.7  | 91.4   | 66.0   | 53.3   | 47.6   | 44.7   | 43.9   |
| 45°   | 2631.8 | 2337.4 | 616.2  | 130.8  | 103.7  | 73.8   | 51.7   | 42.2   | 37.7   | 36.1   | 36.1   |
| 47.5° | 2943.8 | 2515.8 | 451.0  | 116.9  | 86.5   | 57.0   | 41.4   | 34.4   | 30.8   | 29.5   | 29.1   |
| 50°   | 3227.2 | 2639.6 | 325.1  | 102.1  | 70.9   | 45.1   | 33.6   | 28.7   | 26.2   | 24.6   | 24.6   |
| 52.5° | 3463.3 | 2678.6 | 239.4  | 86.1   | 57.4   | 36.1   | 27.9   | 24.6   | 22.1   | 20.9   | 20.9   |
| 55°   | 3671.2 | 2662.6 | 177.9  | 70.9   | 46.3   | 29.5   | 23.8   | 20.9   | 18.9   | 17.6   | 17.6   |
| 57.5° | 3870.5 | 2610.9 | 132.8  | 57.8   | 37.3   | 23.8   | 20.1   | 17.6   | 15.6   | 14.8   | 14.8   |
| 60°   | 4033.2 | 2524.8 | 98.8   | 46.7   | 29.9   | 19.3   | 16.8   | 14.4   | 12.7   | 11.5   | 11.5   |
| 62.5° | 4165.2 | 2429.7 | 72.6   | 38.5   | 23.8   | 15.2   | 13.1   | 11.9   | 9.4    | 8.2    | 8.2    |
| 65°   | 4166.1 | 2271.8 | 54.5   | 32.0   | 18.5   | 11.9   | 9.8    | 9.4    | 6.2    | 4.9    | 4.5    |
| 67.5° | 3864.7 | 1958.6 | 41.8   | 27.5   | 14.4   | 9.0    | 7.4    | 7.8    | 3.3    | 2.1    | 1.6    |
| 68°   | 3755.2 | 1879.1 | 39.4   | 27.1   | 13.5   | 8.6    | 7.0    | 7.8    | 2.9    | 1.6    | 1.2    |
| 70°   | 3166.1 | 1494.9 | 31.6   | 26.2   | 11.9   | 6.6    | 5.7    | 7.8    | 2.5    | 1.2    | 0.8    |
| 72.5° | 2025.0 | 867.6  | 23.4   | 20.9   | 9.0    | 4.9    | 3.7    | 7.0    | 2.5    | 0.8    | 0.4    |
| 75°   | 861.8  | 269.0  | 16.0   | 14.8   | 5.3    | 3.7    | 2.5    | 4.5    | 1.6    | 0.4    | 0.0    |
| 77.5° | 181.6  | 60.7   | 9.4    | 9.0    | 3.7    | 2.5    | 1.6    | 1.2    | 0.4    | 0.0    | 0.0    |
| 80°   | 46.7   | 17.6   | 4.9    | 4.5    | 2.1    | 1.2    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 14.8   | 7.0    | 2.9    | 2.1    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 7.4    | 4.1    | 1.6    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 4.1    | 1.2    | 0.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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)