

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: P322027

Luminaire Tested: **GAN-SA3A-827-U-T2-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P322027  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA3A-827-U-T2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7439 lumens  
Efficiency: N/A  
Efficacy: 77.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
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

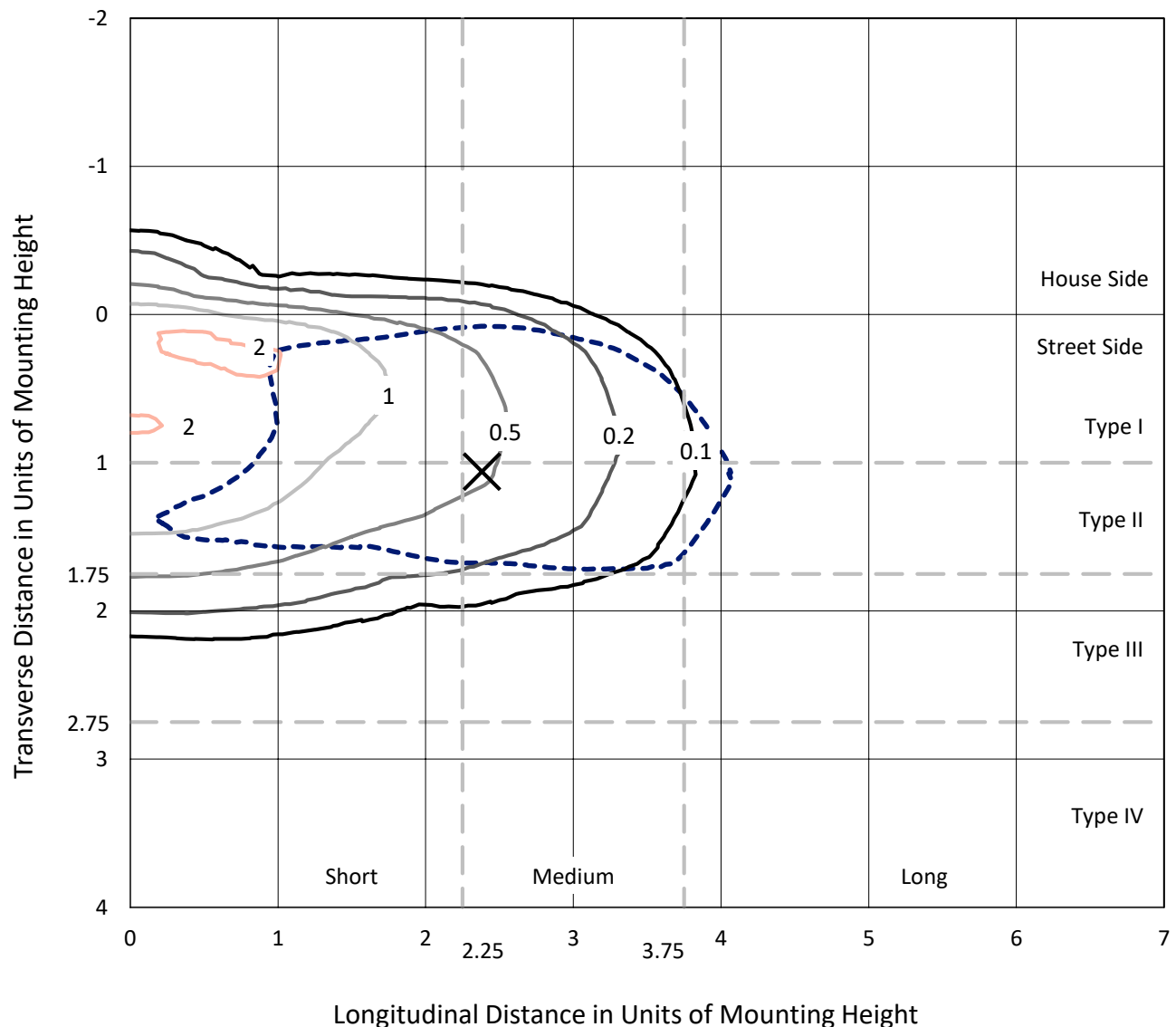


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## Iso-Footcandle Lines of Horizontal Illumination

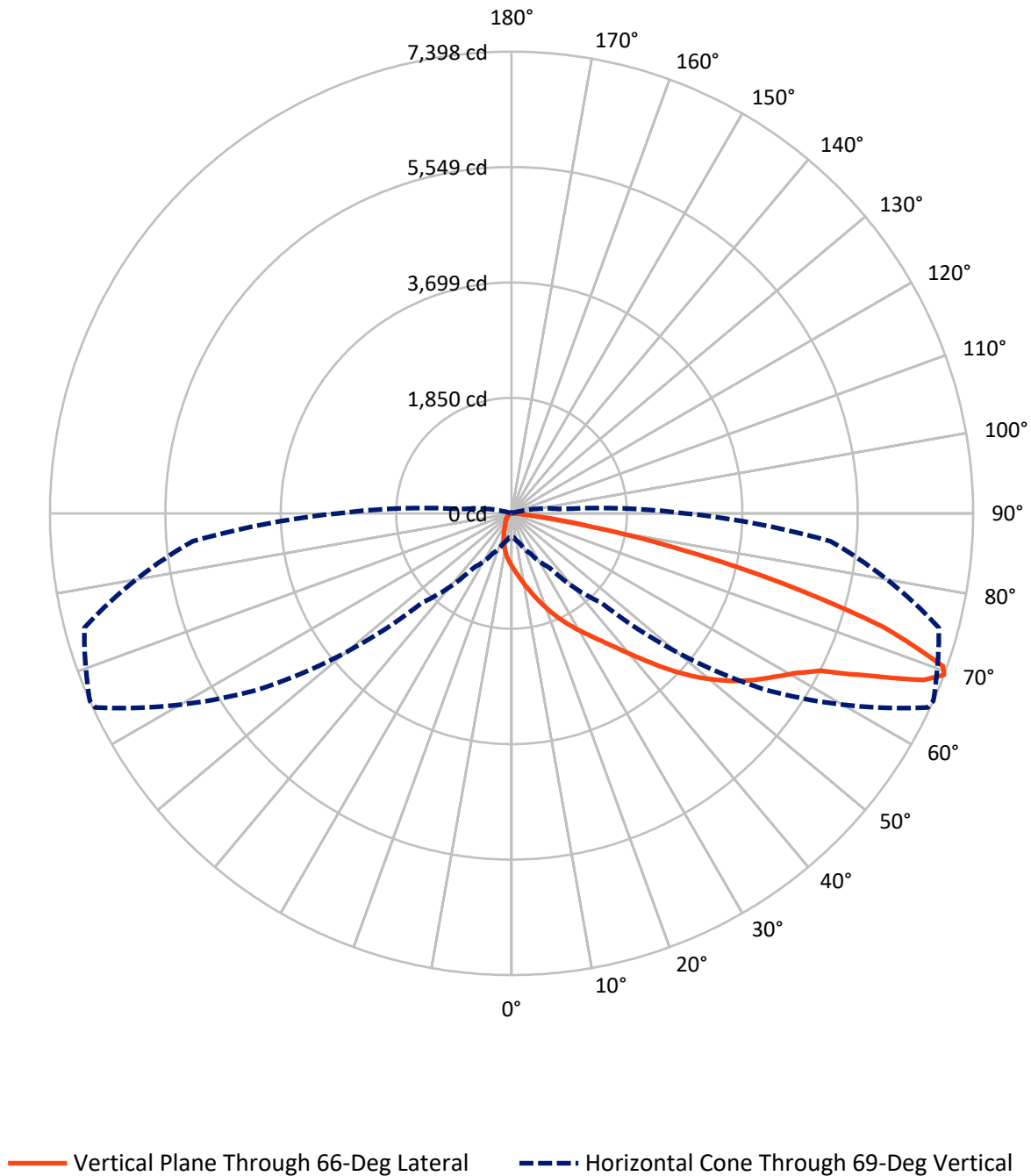
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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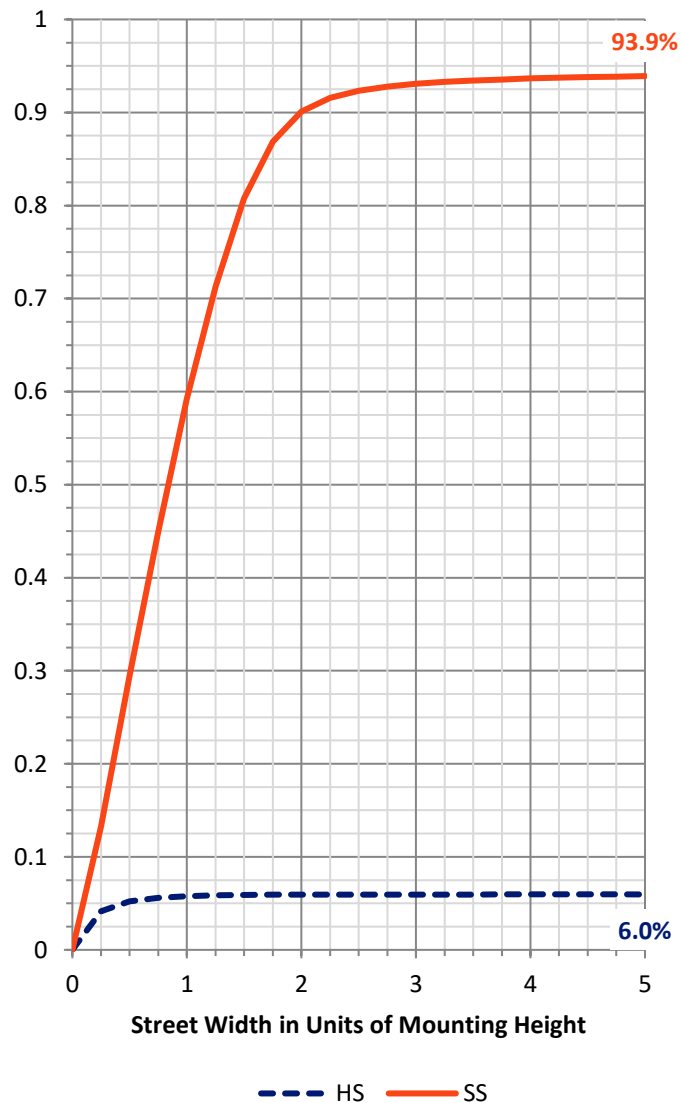
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 446.2    | 0.0    | 446.2  |
|                    | % Fixture | 6.0      | 0.0    | 6.0    |
| <b>Street Side</b> | Lumens    | 6992.8   | 0.0    | 6992.8 |
|                    | % Fixture | 94.0     | 0.0    | 94.0   |
| <b>Total</b>       | Lumens    | 7439.0   | 0.0    | 7439.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 81.8   | 1.1       |
| 10°-20°   | 243.6  | 3.3       |
| 20°-30°   | 424.1  | 5.7       |
| 30°-40°   | 744.1  | 10.0      |
| 40°-50°   | 1245.5 | 16.7      |
| 50°-60°   | 1830.8 | 24.6      |
| 60°-70°   | 1879.8 | 25.3      |
| 70°-80°   | 928.0  | 12.5      |
| 80°-90°   | 61.4   | 0.8       |
| 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°    | 7439.0 | 100.0     |
| 0°-180°   | 7439.0 | 100.0     |

**Coefficient of Utilization**



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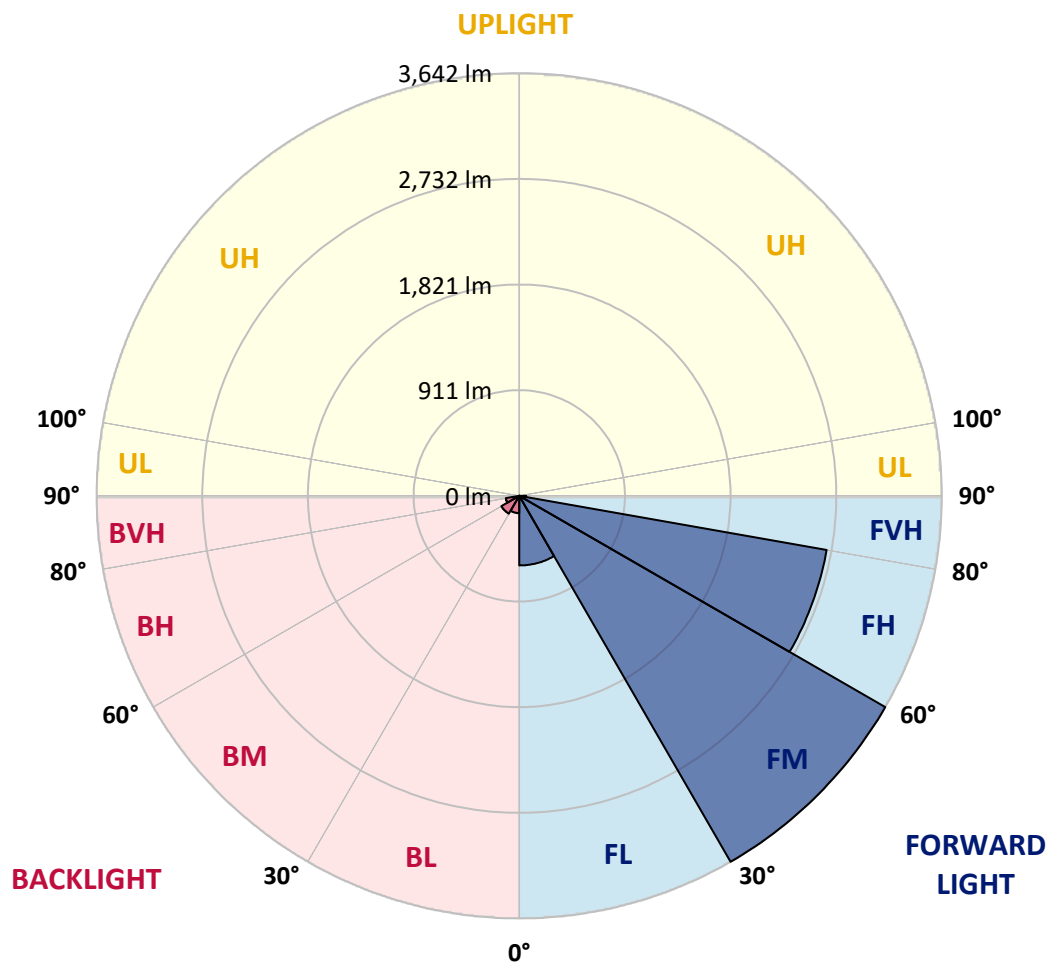
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 600.3  | 8.1       |                         |      |         |
| FM   | (30°-60°)   | 3642.5 | 49.0      |                         |      |         |
| FH   | (60°-80°)   | 2690.1 | 36.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 59.9   | 0.8       |                         |      | G1/100  |
| BL   | (0°-30°)    | 149.2  | 2.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 177.9  | 2.4       | B0/220                  |      |         |
| BH   | (60°-80°)   | 117.6  | 1.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 1.5    | 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°    | 846.6  | 846.6  | 846.6  | 846.6  | 846.6  | 846.6  | 846.6  | 846.6  | 846.6  | 846.6  | 846.6  |
| 2.5°  | 996.4  | 992.2  | 990.4  | 982.6  | 969.2  | 958.9  | 939.2  | 916.2  | 911.9  | 889.7  | 862.5  |
| 5°    | 1125.7 | 1122.2 | 1119.7 | 1108.8 | 1095.0 | 1069.2 | 1033.1 | 990.4  | 982.3  | 939.9  | 885.4  |
| 7.5°  | 1215.8 | 1222.2 | 1222.2 | 1215.1 | 1197.8 | 1178.4 | 1134.2 | 1075.9 | 1065.6 | 1000.6 | 916.2  |
| 10°   | 1268.5 | 1276.2 | 1282.2 | 1288.2 | 1285.8 | 1278.0 | 1236.3 | 1170.6 | 1158.2 | 1072.0 | 951.9  |
| 12.5° | 1273.4 | 1281.2 | 1298.1 | 1323.2 | 1347.6 | 1365.3 | 1339.1 | 1275.5 | 1261.4 | 1154.7 | 994.3  |
| 15°   | 1245.8 | 1254.0 | 1280.1 | 1328.9 | 1387.9 | 1439.5 | 1448.0 | 1391.8 | 1377.3 | 1253.3 | 1047.3 |
| 17.5° | 1197.8 | 1203.1 | 1240.5 | 1308.0 | 1400.6 | 1495.3 | 1546.5 | 1516.5 | 1503.1 | 1366.0 | 1106.3 |
| 20°   | 1162.1 | 1166.0 | 1198.9 | 1271.3 | 1392.8 | 1530.3 | 1639.8 | 1649.0 | 1634.9 | 1486.8 | 1170.2 |
| 22.5° | 1223.2 | 1230.3 | 1231.4 | 1265.6 | 1371.6 | 1547.6 | 1721.8 | 1779.4 | 1768.8 | 1615.1 | 1233.1 |
| 25°   | 1390.4 | 1398.5 | 1371.6 | 1350.4 | 1389.7 | 1555.4 | 1792.1 | 1912.9 | 1904.5 | 1753.2 | 1296.4 |
| 27.5° | 1611.2 | 1619.7 | 1585.0 | 1521.8 | 1484.0 | 1584.7 | 1854.6 | 2048.6 | 2048.3 | 1899.5 | 1364.6 |
| 30°   | 1828.1 | 1836.6 | 1801.3 | 1738.0 | 1651.1 | 1667.7 | 1908.7 | 2190.7 | 2192.8 | 2050.4 | 1437.0 |
| 32.5° | 2055.7 | 2066.3 | 2029.9 | 1948.6 | 1857.8 | 1811.2 | 1984.7 | 2333.4 | 2345.4 | 2225.3 | 1518.6 |
| 35°   | 2314.3 | 2315.7 | 2264.5 | 2179.3 | 2074.8 | 2003.0 | 2106.6 | 2493.5 | 2522.1 | 2441.9 | 1622.1 |
| 37.5° | 2568.0 | 2578.3 | 2536.2 | 2401.9 | 2305.8 | 2224.6 | 2287.8 | 2693.4 | 2734.1 | 2706.5 | 1757.5 |
| 40°   | 2756.0 | 2777.5 | 2771.5 | 2626.7 | 2535.5 | 2477.6 | 2512.9 | 2931.2 | 2982.8 | 3014.6 | 1928.1 |
| 42.5° | 2874.0 | 2890.3 | 2917.8 | 2830.5 | 2747.9 | 2757.4 | 2778.6 | 3208.2 | 3271.8 | 3365.8 | 2124.2 |
| 45°   | 3009.3 | 3017.1 | 3040.1 | 3001.6 | 2945.7 | 3041.8 | 3060.6 | 3520.2 | 3587.0 | 3743.5 | 2341.9 |
| 47.5° | 3174.7 | 3193.1 | 3199.4 | 3164.1 | 3138.6 | 3293.4 | 3332.3 | 3804.0 | 3897.6 | 4148.1 | 2572.3 |
| 50°   | 3385.3 | 3390.2 | 3401.2 | 3378.2 | 3352.8 | 3509.6 | 3576.1 | 4101.8 | 4187.0 | 4554.1 | 2799.4 |
| 52.5° | 3591.3 | 3608.9 | 3647.1 | 3632.6 | 3622.4 | 3693.7 | 3793.4 | 4370.4 | 4465.4 | 4892.6 | 3026.3 |
| 55°   | 3650.6 | 3665.8 | 3797.6 | 3887.7 | 3971.1 | 3920.6 | 4001.1 | 4611.0 | 4713.8 | 5195.0 | 3244.6 |
| 57.5° | 3413.5 | 3444.3 | 3672.5 | 3907.1 | 4253.1 | 4273.2 | 4286.6 | 4858.0 | 4950.2 | 5426.8 | 3471.8 |
| 60°   | 2814.3 | 2820.3 | 3194.8 | 3597.3 | 4206.4 | 4580.9 | 4703.5 | 5123.3 | 5200.7 | 5642.7 | 3743.9 |
| 62.5° | 1790.0 | 1851.1 | 2262.0 | 2830.2 | 3713.2 | 4536.4 | 5207.8 | 5524.7 | 5553.0 | 5901.7 | 4134.0 |
| 65°   | 852.6  | 892.2  | 1188.3 | 1748.6 | 2689.6 | 3966.5 | 5555.8 | 6250.8 | 6263.5 | 6415.1 | 4655.1 |
| 67.5° | 472.1  | 491.1  | 632.1  | 941.3  | 1572.3 | 2805.1 | 5415.2 | 7110.8 | 7122.8 | 6939.4 | 5112.4 |
| 69°   | 369.2  | 385.5  | 496.4  | 709.5  | 1066.0 | 2016.1 | 4900.4 | 7362.7 | 7398.4 | 7089.6 | 5128.6 |
| 70°   | 313.4  | 329.3  | 427.5  | 599.3  | 857.2  | 1557.8 | 4361.9 | 7300.2 | 7338.0 | 7075.5 | 5007.4 |
| 72.5° | 191.9  | 201.0  | 284.8  | 421.9  | 574.5  | 783.7  | 2689.9 | 6173.8 | 6237.7 | 6490.3 | 4303.6 |
| 75°   | 129.3  | 134.3  | 178.1  | 291.1  | 410.9  | 403.5  | 1397.4 | 4351.6 | 4490.1 | 5048.8 | 3178.6 |
| 77.5° | 92.6   | 97.2   | 119.4  | 188.3  | 288.0  | 266.4  | 632.8  | 2704.4 | 2734.1 | 3028.1 | 1733.4 |
| 80°   | 52.6   | 56.9   | 84.4   | 112.0  | 195.4  | 177.7  | 251.6  | 1291.8 | 1306.6 | 1298.5 | 578.8  |
| 82.5° | 27.6   | 31.1   | 46.3   | 73.8   | 125.4  | 116.2  | 104.6  | 432.5  | 434.6  | 361.5  | 126.8  |
| 85°   | 5.3    | 6.4    | 23.0   | 50.5   | 64.7   | 50.5   | 42.8   | 101.4  | 103.5  | 91.5   | 31.4   |
| 87.5° | 0.0    | 0.4    | 9.2    | 11.3   | 12.7   | 13.1   | 13.8   | 19.8   | 21.2   | 28.6   | 8.5    |
| 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°    | 846.6  | 846.6 | 846.6 | 846.6 | 846.6 | 846.6 | 846.6 | 846.6 | 846.6 | 846.6 | 846.6 |
| 2.5°  | 850.5  | 837.7 | 813.4 | 785.1 | 763.2 | 741.6 | 724.7 | 707.0 | 700.7 | 697.5 | 697.1 |
| 5°    | 858.9  | 832.1 | 780.5 | 727.5 | 684.0 | 643.1 | 613.7 | 585.8 | 572.8 | 566.7 | 564.3 |
| 7.5°  | 873.1  | 830.0 | 746.9 | 666.0 | 603.5 | 552.3 | 511.6 | 481.2 | 466.0 | 459.7 | 457.2 |
| 10°   | 889.7  | 827.1 | 707.7 | 601.0 | 521.2 | 468.2 | 427.9 | 397.9 | 381.2 | 374.2 | 370.6 |
| 12.5° | 909.1  | 822.2 | 662.5 | 535.3 | 450.9 | 397.9 | 349.1 | 312.0 | 292.9 | 284.8 | 280.9 |
| 15°   | 933.1  | 817.3 | 615.2 | 473.5 | 389.0 | 324.4 | 271.0 | 245.9 | 242.0 | 240.6 | 241.0 |
| 17.5° | 956.8  | 809.5 | 563.6 | 412.3 | 324.0 | 253.3 | 226.1 | 224.7 | 225.4 | 225.4 | 225.4 |
| 20°   | 978.0  | 791.8 | 507.4 | 360.0 | 262.2 | 213.8 | 208.1 | 205.6 | 203.9 | 202.5 | 200.7 |
| 22.5° | 994.6  | 768.1 | 453.3 | 308.1 | 214.1 | 195.7 | 186.9 | 179.1 | 172.8 | 168.5 | 166.4 |
| 25°   | 1005.9 | 736.7 | 403.9 | 258.3 | 192.6 | 178.1 | 162.2 | 149.1 | 139.2 | 133.2 | 130.7 |
| 27.5° | 1014.4 | 702.8 | 359.7 | 216.2 | 177.7 | 157.6 | 136.7 | 121.2 | 110.9 | 105.6 | 103.5 |
| 30°   | 1020.4 | 664.3 | 320.8 | 190.1 | 161.1 | 136.0 | 113.8 | 98.6  | 91.2  | 88.3  | 86.9  |
| 32.5° | 1026.1 | 621.5 | 284.1 | 177.7 | 145.6 | 116.2 | 95.4  | 83.7  | 79.1  | 75.6  | 74.6  |
| 35°   | 1040.2 | 581.9 | 249.1 | 164.7 | 129.7 | 99.3  | 82.0  | 73.5  | 68.9  | 66.8  | 66.1  |
| 37.5° | 1073.8 | 552.6 | 215.5 | 151.2 | 113.8 | 85.9  | 71.7  | 65.7  | 61.5  | 59.4  | 58.7  |
| 40°   | 1127.8 | 537.8 | 187.3 | 136.7 | 98.2  | 75.6  | 65.0  | 59.4  | 54.8  | 51.6  | 50.9  |
| 42.5° | 1207.3 | 539.9 | 167.5 | 122.3 | 85.9  | 67.5  | 58.7  | 51.9  | 47.0  | 44.2  | 43.5  |
| 45°   | 1303.8 | 555.4 | 153.7 | 108.1 | 75.6  | 61.1  | 51.6  | 44.5  | 39.9  | 37.5  | 36.7  |
| 47.5° | 1408.4 | 580.5 | 142.4 | 95.4  | 67.5  | 55.1  | 44.5  | 37.1  | 33.2  | 31.1  | 30.7  |
| 50°   | 1518.6 | 604.9 | 130.7 | 83.0  | 60.4  | 49.1  | 37.5  | 30.7  | 27.6  | 25.8  | 25.1  |
| 52.5° | 1630.3 | 633.2 | 120.1 | 71.7  | 54.4  | 42.0  | 31.1  | 25.1  | 22.6  | 21.2  | 20.5  |
| 55°   | 1750.4 | 654.4 | 109.9 | 62.9  | 48.4  | 35.7  | 25.8  | 20.8  | 18.7  | 17.0  | 16.6  |
| 57.5° | 1891.7 | 687.2 | 99.3  | 54.4  | 41.3  | 29.7  | 21.2  | 16.6  | 14.8  | 13.1  | 12.7  |
| 60°   | 2082.5 | 725.7 | 88.0  | 48.1  | 33.9  | 24.4  | 17.3  | 13.4  | 11.3  | 9.9   | 9.5   |
| 62.5° | 2334.1 | 768.5 | 73.8  | 42.0  | 27.6  | 19.8  | 13.8  | 10.6  | 8.1   | 6.4   | 6.4   |
| 65°   | 2653.2 | 838.1 | 60.4  | 35.3  | 22.6  | 16.3  | 10.6  | 7.8   | 4.6   | 2.8   | 2.8   |
| 67.5° | 2839.4 | 850.1 | 48.8  | 29.0  | 18.4  | 13.8  | 8.8   | 5.3   | 1.4   | 0.4   | 0.0   |
| 69°   | 2779.7 | 780.5 | 41.3  | 24.7  | 15.9  | 13.1  | 8.1   | 3.9   | 0.7   | 0.0   | 0.0   |
| 70°   | 2667.3 | 713.7 | 36.4  | 21.9  | 14.5  | 12.4  | 7.8   | 2.8   | 0.7   | 0.0   | 0.0   |
| 72.5° | 2204.1 | 508.1 | 27.6  | 16.3  | 10.6  | 11.0  | 7.1   | 1.8   | 0.7   | 0.0   | 0.0   |
| 75°   | 1605.5 | 308.8 | 19.8  | 11.3  | 6.7   | 8.1   | 4.9   | 0.7   | 0.4   | 0.0   | 0.0   |
| 77.5° | 893.2  | 145.6 | 12.4  | 6.4   | 4.2   | 4.9   | 2.5   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 290.1  | 39.6  | 5.7   | 3.5   | 2.5   | 2.8   | 1.1   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 53.7   | 11.3  | 3.2   | 1.8   | 0.7   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 11.7   | 4.6   | 1.8   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 3.9    | 1.4   | 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)