

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: P323747

Luminaire Tested: **GAN-SA3A-727-U-SL4-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323747  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA3A-727-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9656 lumens  
Efficiency: N/A  
Efficacy: 100.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

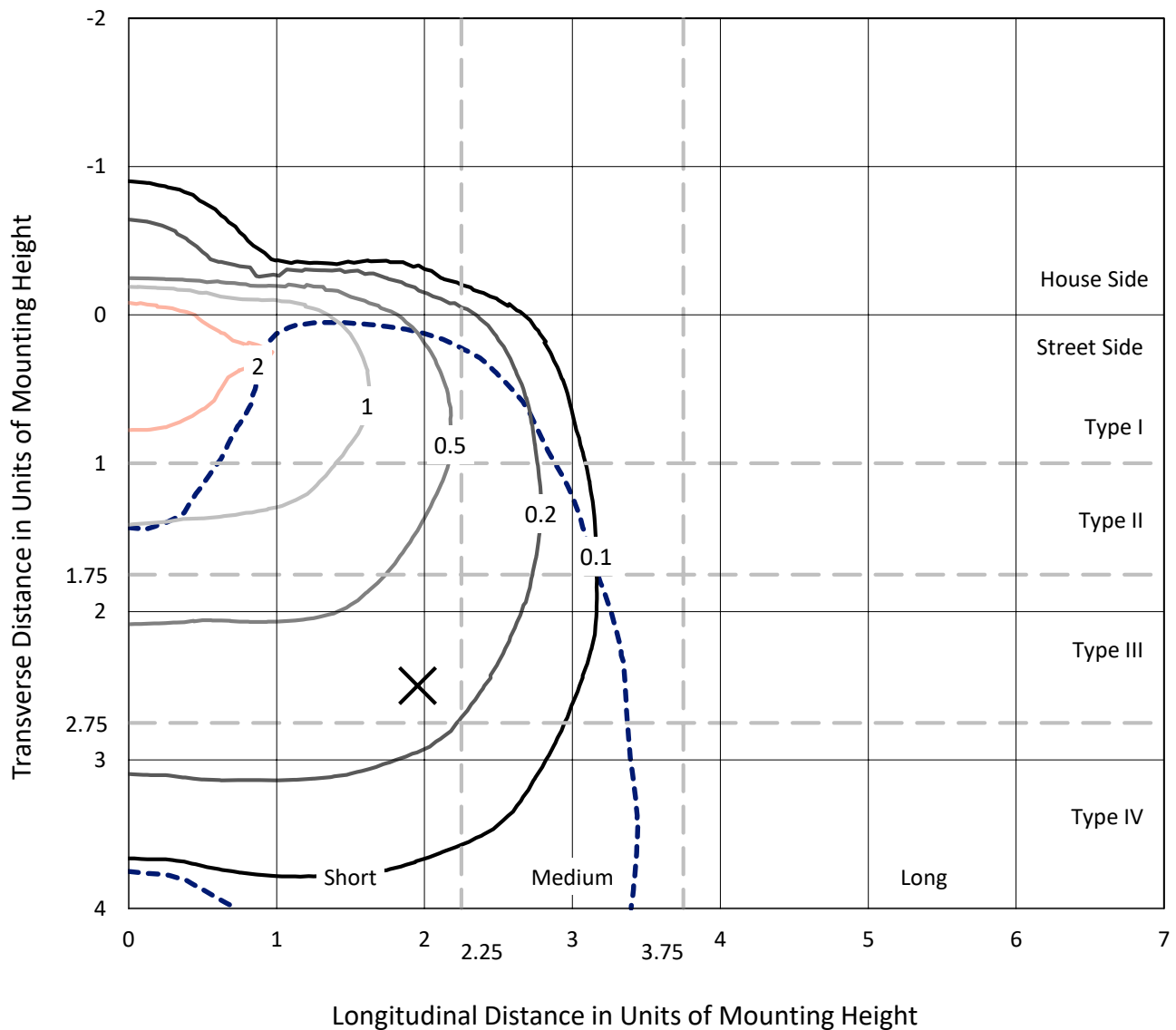
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

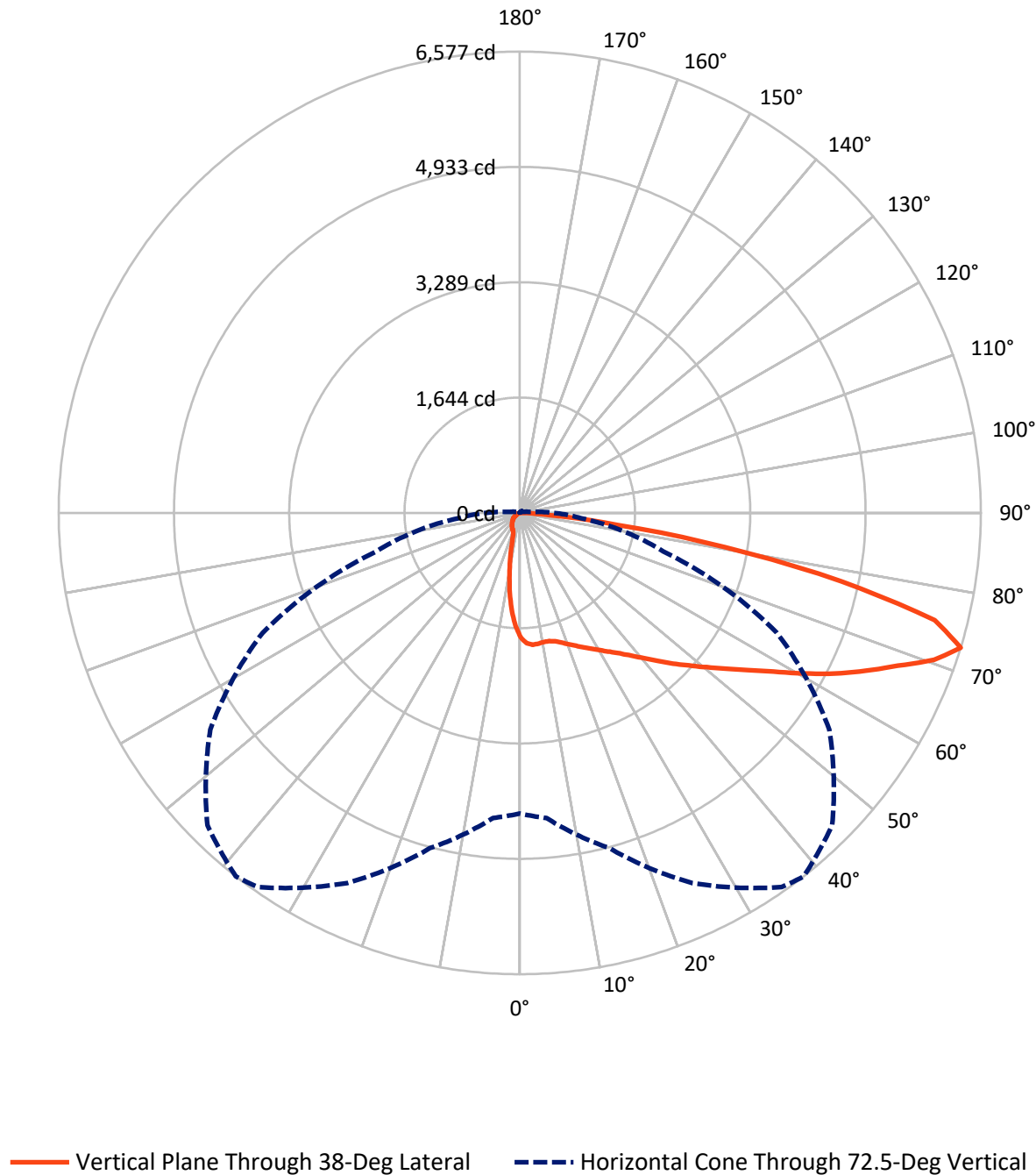
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc  
Type IV - Short - N/A

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CATALOG NUMBER: GAN-SA3A-727-U-SL4-HSS

## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 812.6    | 0.0    | 812.6  |
|                    | % Fixture | 8.4      | 0.0    | 8.4    |
| <b>Street Side</b> | Lumens    | 8843.4   | 0.0    | 8843.4 |
|                    | % Fixture | 91.6     | 0.0    | 91.6   |
| <b>Total</b>       | Lumens    | 9656.0   | 0.0    | 9656.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 151.3  | 1.6       |
| 10°-20°   | 370.0  | 3.8       |
| 20°-30°   | 588.5  | 6.1       |
| 30°-40°   | 884.8  | 9.2       |
| 40°-50°   | 1349.8 | 14.0      |
| 50°-60°   | 1907.7 | 19.8      |
| 60°-70°   | 2392.9 | 24.8      |
| 70°-80°   | 1789.2 | 18.5      |
| 80°-90°   | 221.9  | 2.3       |
| 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°    | 9656.0 | 100.0     |
| 0°-180°   | 9656.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P323747

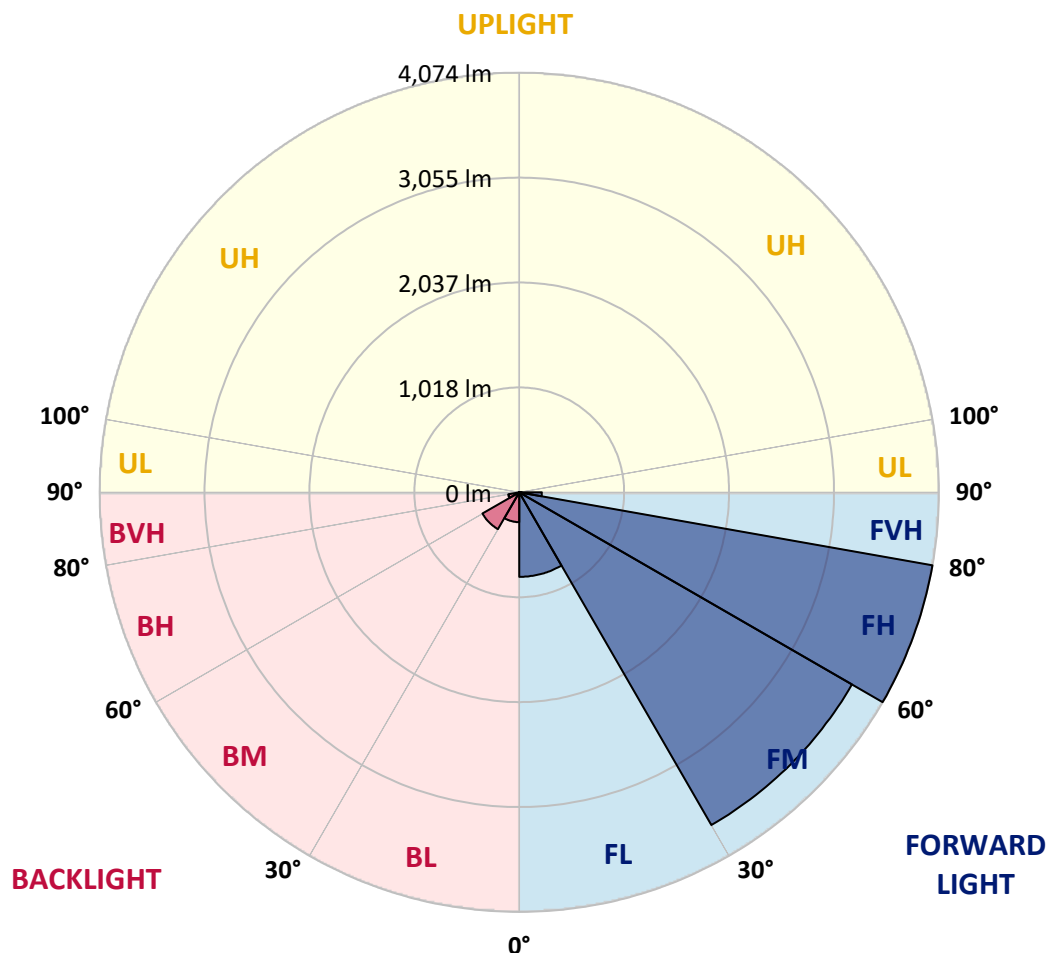
CATALOG NUMBER: GAN-SA3A-727-U-SL4-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 820.5  | 8.5       |                         |      |         |
| FM   | (30°-60°)   | 3729.6 | 38.6      |                         |      |         |
| FH   | (60°-80°)   | 4073.5 | 42.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 219.8  | 2.3       |                         |      | G2/225  |
| BL   | (0°-30°)    | 289.3  | 3.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 412.6  | 4.3       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 108.5  | 1.1       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 2.1    | 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 IV Short





REPORT NUMBER: P323747

CATALOG NUMBER: GAN-SA3A-727-U-SL4-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 38°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 |
| 2.5°  | 1884.8 | 1885.2 | 1880.8 | 1873.6 | 1864.3 | 1859.5 | 1851.5 | 1838.7 | 1825.0 | 1800.6 | 1774.1 |
| 5°    | 1923.3 | 1923.3 | 1917.7 | 1908.0 | 1893.2 | 1888.8 | 1873.6 | 1853.1 | 1825.0 | 1785.3 | 1740.8 |
| 7.5°  | 1919.3 | 1920.1 | 1912.5 | 1902.4 | 1887.6 | 1883.6 | 1865.1 | 1842.3 | 1807.4 | 1759.3 | 1702.3 |
| 10°   | 1898.4 | 1900.4 | 1894.4 | 1889.6 | 1876.0 | 1871.5 | 1854.3 | 1831.4 | 1796.6 | 1745.2 | 1679.9 |
| 12.5° | 1877.2 | 1879.2 | 1881.2 | 1885.6 | 1877.2 | 1875.6 | 1861.9 | 1842.7 | 1809.4 | 1756.1 | 1682.3 |
| 15°   | 1863.5 | 1867.5 | 1882.0 | 1899.2 | 1901.2 | 1899.6 | 1890.8 | 1872.8 | 1839.1 | 1783.7 | 1699.5 |
| 17.5° | 1863.5 | 1869.9 | 1900.0 | 1932.9 | 1944.5 | 1945.7 | 1938.1 | 1912.9 | 1872.8 | 1813.4 | 1715.6 |
| 20°   | 1879.2 | 1888.0 | 1934.9 | 1981.4 | 2000.7 | 2000.7 | 1985.8 | 1950.6 | 1903.6 | 1840.3 | 1726.4 |
| 22.5° | 1919.3 | 1930.9 | 1989.9 | 2043.6 | 2064.0 | 2059.6 | 2039.6 | 1988.2 | 1935.7 | 1870.7 | 1740.0 |
| 25°   | 1998.3 | 2007.1 | 2068.4 | 2122.6 | 2135.0 | 2125.0 | 2099.7 | 2034.0 | 1976.6 | 1912.1 | 1764.9 |
| 27.5° | 2100.1 | 2101.3 | 2164.7 | 2210.4 | 2202.8 | 2196.0 | 2164.3 | 2091.3 | 2035.6 | 1971.0 | 1807.8 |
| 30°   | 2212.0 | 2212.0 | 2267.8 | 2302.6 | 2279.4 | 2273.8 | 2242.1 | 2160.7 | 2111.0 | 2051.2 | 1868.7 |
| 32.5° | 2320.3 | 2325.1 | 2370.4 | 2392.5 | 2366.4 | 2360.8 | 2329.9 | 2248.5 | 2211.2 | 2173.5 | 1963.8 |
| 35°   | 2425.0 | 2428.6 | 2471.5 | 2483.5 | 2458.6 | 2460.2 | 2438.2 | 2369.2 | 2355.2 | 2350.4 | 2106.9 |
| 37.5° | 2526.4 | 2527.2 | 2570.9 | 2578.5 | 2566.1 | 2579.7 | 2581.8 | 2520.8 | 2546.9 | 2585.8 | 2308.7 |
| 40°   | 2619.0 | 2619.8 | 2663.2 | 2682.8 | 2704.1 | 2721.7 | 2737.3 | 2704.9 | 2791.1 | 2881.3 | 2548.9 |
| 42.5° | 2693.2 | 2701.7 | 2756.6 | 2793.9 | 2850.0 | 2883.7 | 2926.2 | 2924.6 | 3081.8 | 3217.4 | 2839.2 |
| 45°   | 2758.6 | 2773.0 | 2849.6 | 2915.0 | 3011.2 | 3065.0 | 3131.5 | 3183.7 | 3409.1 | 3591.5 | 3133.2 |
| 47.5° | 2844.8 | 2858.5 | 2945.9 | 3052.9 | 3181.3 | 3251.9 | 3362.1 | 3474.8 | 3768.8 | 3958.8 | 3420.3 |
| 50°   | 2966.3 | 2960.3 | 3046.5 | 3200.1 | 3364.9 | 3457.6 | 3614.8 | 3783.6 | 4125.7 | 4278.9 | 3589.1 |
| 52.5° | 3095.9 | 3093.5 | 3157.2 | 3360.1 | 3581.5 | 3689.8 | 3897.5 | 4102.8 | 4466.9 | 4499.4 | 3666.5 |
| 55°   | 3256.3 | 3239.0 | 3292.8 | 3542.6 | 3838.5 | 3954.8 | 4199.5 | 4418.8 | 4738.8 | 4623.7 | 3705.4 |
| 57.5° | 3424.3 | 3395.8 | 3447.1 | 3745.9 | 4128.5 | 4266.0 | 4533.9 | 4726.8 | 4919.7 | 4708.8 | 3705.0 |
| 60°   | 3597.9 | 3564.2 | 3625.2 | 4000.2 | 4488.6 | 4647.8 | 4896.4 | 4934.9 | 5088.5 | 4751.7 | 3677.7 |
| 62.5° | 3743.1 | 3723.0 | 3813.7 | 4272.0 | 4890.8 | 5047.2 | 5170.3 | 5124.2 | 5230.9 | 4784.9 | 3614.0 |
| 65°   | 3896.7 | 3897.9 | 4044.3 | 4589.2 | 5318.3 | 5423.8 | 5434.2 | 5369.6 | 5350.0 | 4778.1 | 3398.2 |
| 67.5° | 4104.4 | 4123.7 | 4367.9 | 5019.9 | 5734.2 | 5815.6 | 5814.8 | 5635.5 | 5437.0 | 4507.0 | 2919.8 |
| 70°   | 4324.2 | 4369.5 | 4740.8 | 5512.8 | 6188.1 | 6270.7 | 6228.2 | 5804.7 | 5119.4 | 3644.4 | 2066.4 |
| 72.5° | 4287.3 | 4365.9 | 4948.2 | 5823.6 | 6514.1 | 6577.1 | 6300.8 | 5388.9 | 4046.3 | 2118.2 | 879.8  |
| 75°   | 3307.6 | 3398.6 | 4537.1 | 5515.6 | 6172.1 | 6115.5 | 5413.7 | 4193.4 | 2211.2 | 591.1  | 198.1  |
| 77.5° | 1747.2 | 1795.8 | 2997.2 | 4201.9 | 4812.6 | 4694.3 | 3813.7 | 2326.3 | 674.1  | 146.4  | 89.0   |
| 80°   | 915.1  | 926.4  | 1306.1 | 2384.1 | 2970.3 | 2971.1 | 2260.1 | 1021.8 | 277.9  | 75.0   | 59.8   |
| 82.5° | 490.0  | 499.7  | 690.2  | 1101.6 | 1556.3 | 1410.8 | 865.4  | 562.2  | 161.6  | 42.5   | 57.3   |
| 85°   | 117.9  | 119.9  | 391.4  | 503.3  | 612.0  | 437.1  | 257.1  | 472.0  | 43.7   | 24.9   | 46.5   |
| 87.5° | 45.3   | 46.1   | 145.2  | 217.8  | 156.0  | 101.1  | 120.3  | 176.0  | 5.6    | 9.6    | 7.2    |
| 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°    | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 | 1775.7 |
| 2.5°  | 1758.1 | 1747.6 | 1722.0 | 1689.5 | 1660.6 | 1639.8 | 1608.5 | 1588.0 | 1574.4 | 1574.0 | 1568.8 |
| 5°    | 1713.5 | 1692.3 | 1637.0 | 1571.2 | 1511.4 | 1457.7 | 1394.3 | 1344.2 | 1306.9 | 1300.9 | 1288.1 |
| 7.5°  | 1665.8 | 1630.9 | 1545.9 | 1443.3 | 1343.0 | 1241.1 | 1122.8 | 1049.5 | 986.5  | 956.4  | 953.2  |
| 10°   | 1636.6 | 1587.6 | 1466.9 | 1318.5 | 1161.3 | 995.7  | 840.9  | 733.9  | 656.5  | 634.4  | 618.0  |
| 12.5° | 1630.5 | 1566.0 | 1406.0 | 1201.4 | 976.9  | 757.9  | 586.7  | 472.8  | 411.0  | 391.4  | 386.2  |
| 15°   | 1636.6 | 1555.9 | 1354.6 | 1085.6 | 790.0  | 537.8  | 393.8  | 327.6  | 304.4  | 298.8  | 298.4  |
| 17.5° | 1640.2 | 1543.9 | 1296.5 | 956.8  | 608.7  | 384.2  | 301.6  | 282.3  | 278.7  | 278.3  | 279.1  |
| 20°   | 1639.8 | 1525.5 | 1227.1 | 813.3  | 452.7  | 302.0  | 272.7  | 268.7  | 267.9  | 268.3  | 267.9  |
| 22.5° | 1637.0 | 1503.8 | 1150.9 | 665.3  | 342.1  | 269.9  | 260.3  | 257.9  | 257.5  | 257.5  | 257.5  |
| 25°   | 1642.2 | 1486.6 | 1067.1 | 523.7  | 281.9  | 255.0  | 249.0  | 247.0  | 246.6  | 246.6  | 245.8  |
| 27.5° | 1661.0 | 1476.9 | 975.3  | 403.0  | 254.6  | 241.8  | 237.0  | 236.6  | 235.4  | 235.0  | 235.8  |
| 30°   | 1691.5 | 1476.9 | 874.6  | 313.6  | 238.2  | 228.2  | 224.6  | 223.8  | 223.4  | 223.0  | 223.4  |
| 32.5° | 1745.2 | 1488.2 | 764.7  | 260.7  | 222.6  | 212.9  | 210.5  | 211.7  | 210.5  | 210.5  | 210.5  |
| 35°   | 1842.3 | 1521.9 | 649.6  | 227.4  | 206.1  | 198.1  | 195.7  | 197.3  | 196.5  | 196.5  | 196.1  |
| 37.5° | 1983.8 | 1584.4 | 533.8  | 207.3  | 191.7  | 183.3  | 180.1  | 182.5  | 181.7  | 181.7  | 181.3  |
| 40°   | 2156.3 | 1675.5 | 423.5  | 192.1  | 177.7  | 168.8  | 166.0  | 167.2  | 165.2  | 165.2  | 166.0  |
| 42.5° | 2369.2 | 1790.9 | 327.2  | 177.2  | 163.6  | 155.2  | 153.6  | 152.4  | 148.8  | 146.8  | 147.2  |
| 45°   | 2605.8 | 1911.3 | 255.0  | 162.8  | 150.4  | 143.6  | 141.2  | 138.0  | 131.9  | 127.9  | 128.3  |
| 47.5° | 2817.1 | 2003.9 | 207.3  | 148.8  | 138.4  | 133.1  | 129.5  | 123.5  | 114.7  | 109.9  | 110.3  |
| 50°   | 2928.2 | 2017.9 | 176.4  | 134.7  | 127.1  | 121.9  | 116.7  | 107.5  | 97.0   | 91.8   | 91.4   |
| 52.5° | 2956.7 | 1952.2 | 153.6  | 121.9  | 115.9  | 109.9  | 103.1  | 90.6   | 79.0   | 73.4   | 72.6   |
| 55°   | 2967.1 | 1851.9 | 133.1  | 109.9  | 103.9  | 97.0   | 88.2   | 74.2   | 63.4   | 57.7   | 57.3   |
| 57.5° | 2932.6 | 1702.3 | 117.1  | 99.1   | 91.8   | 83.4   | 72.6   | 59.4   | 48.9   | 44.5   | 44.5   |
| 60°   | 2856.0 | 1499.8 | 104.7  | 87.4   | 79.4   | 69.8   | 58.5   | 46.1   | 36.5   | 32.9   | 32.9   |
| 62.5° | 2703.3 | 1237.5 | 93.0   | 75.4   | 67.8   | 57.7   | 47.3   | 34.9   | 25.7   | 23.7   | 24.1   |
| 65°   | 2414.9 | 938.8  | 81.4   | 64.6   | 57.7   | 47.7   | 36.9   | 24.9   | 17.2   | 17.2   | 18.0   |
| 67.5° | 1969.4 | 652.1  | 69.4   | 54.9   | 49.7   | 38.9   | 28.1   | 17.2   | 12.0   | 13.6   | 15.2   |
| 70°   | 1303.7 | 365.7  | 59.4   | 45.3   | 42.5   | 30.9   | 20.9   | 11.6   | 9.6    | 12.8   | 15.6   |
| 72.5° | 492.0  | 142.4  | 49.7   | 36.5   | 36.9   | 23.7   | 14.8   | 8.8    | 8.8    | 14.0   | 18.4   |
| 75°   | 137.1  | 69.8   | 35.7   | 26.9   | 28.9   | 17.2   | 10.8   | 7.6    | 8.4    | 16.0   | 21.7   |
| 77.5° | 80.6   | 51.3   | 23.3   | 15.6   | 19.6   | 12.0   | 7.2    | 6.0    | 7.2    | 13.6   | 20.9   |
| 80°   | 65.0   | 27.3   | 13.6   | 8.0    | 10.8   | 6.8    | 4.8    | 3.6    | 2.0    | 5.2    | 10.8   |
| 82.5° | 65.0   | 16.4   | 6.4    | 5.6    | 5.6    | 3.6    | 2.4    | 1.6    | 0.4    | 0.0    | 2.8    |
| 85°   | 43.7   | 6.8    | 4.0    | 3.6    | 2.8    | 1.2    | 0.8    | 0.4    | 0.0    | 0.0    | 0.0    |
| 87.5° | 7.2    | 2.8    | 1.6    | 0.8    | 0.4    | 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)