

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: P191219

Luminaire Tested: **GAN-AF-01-LED-U-SL4-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191219  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-01-LED-U-SL4-1200-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA LIGHTSQUARE 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: 5676.4 lumens  
Efficiency: N/A  
Efficacy: 84.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G2

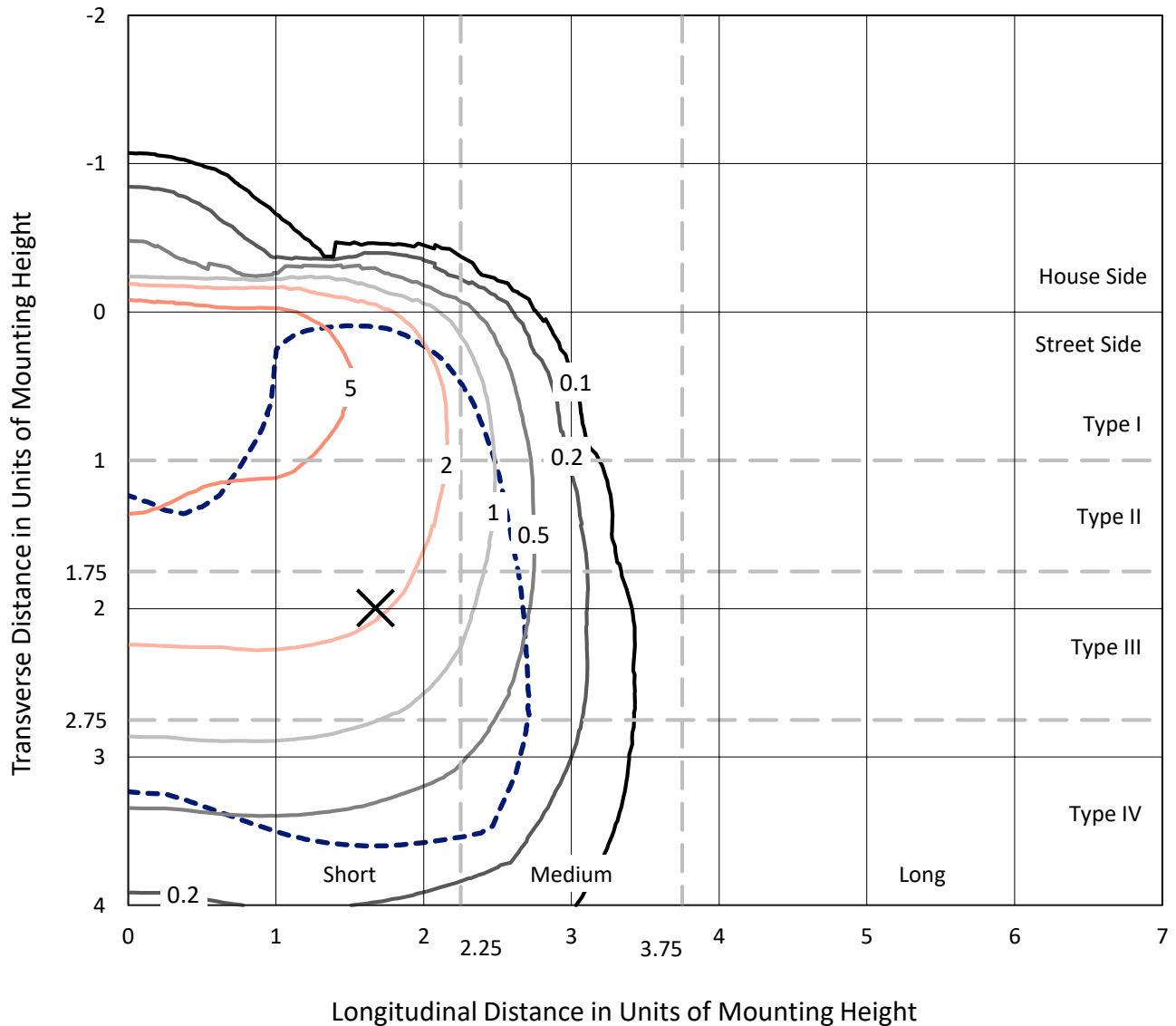
Input Watts (W): 67  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

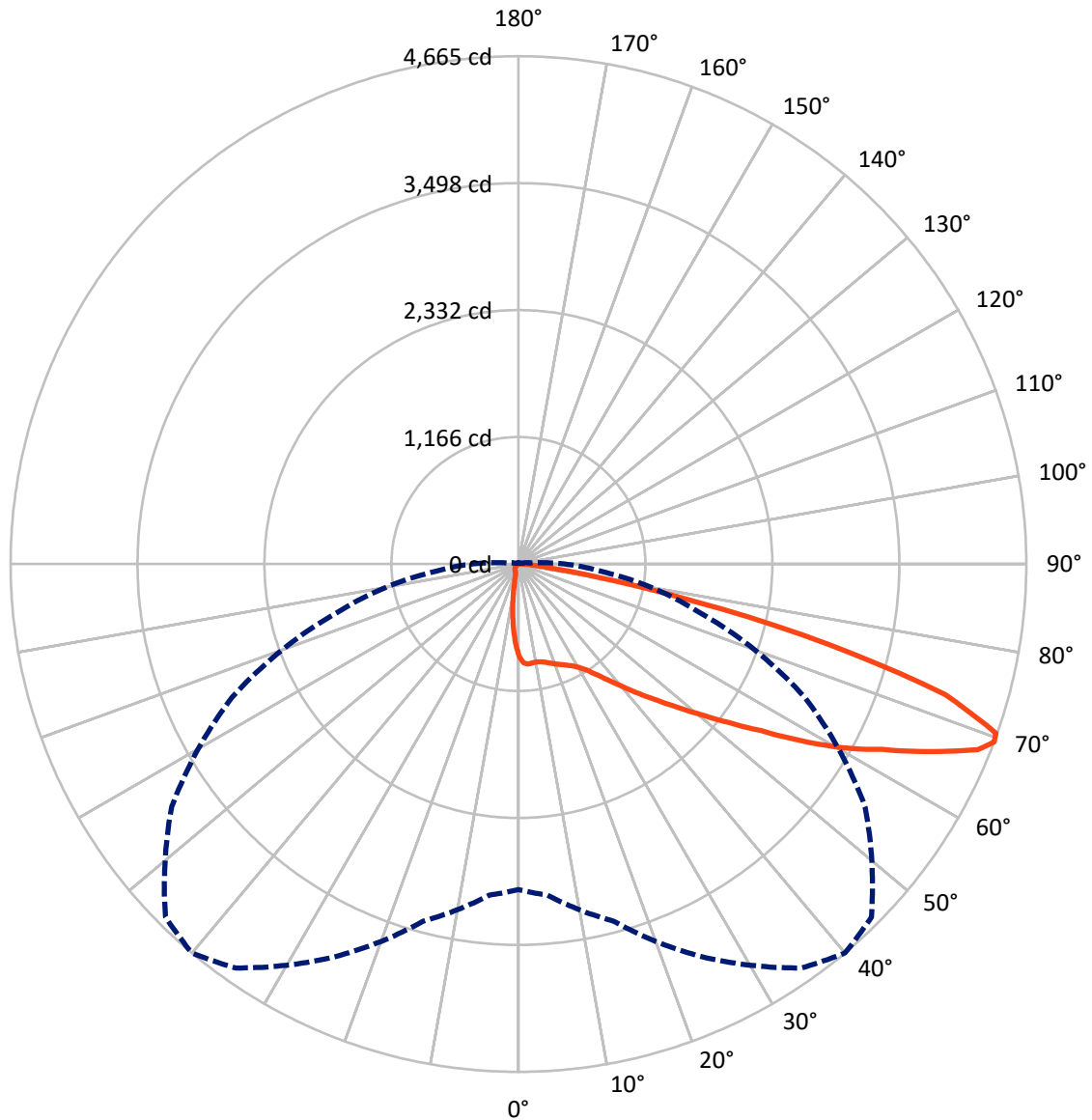


Based on 10 foot mounting height. Maximum calculated value = 9.3 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 332.1    | 0.0    | 332.1  |
|                    | % Fixture | 5.9      | 0.0    | 5.9    |
| <b>Street Side</b> | Lumens    | 5344.3   | 0.0    | 5344.3 |
|                    | % Fixture | 94.1     | 0.0    | 94.1   |
| <b>Total</b>       | Lumens    | 5676.4   | 0.0    | 5676.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 68.8   | 1.2       |
| 10°-20°   | 169.1  | 3.0       |
| 20°-30°   | 284.8  | 5.0       |
| 30°-40°   | 466.3  | 8.2       |
| 40°-50°   | 807.3  | 14.2      |
| 50°-60°   | 1271.6 | 22.4      |
| 60°-70°   | 1660.7 | 29.3      |
| 70°-80°   | 855.3  | 15.1      |
| 80°-90°   | 92.5   | 1.6       |
| 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°    | 5676.4 | 100.0     |
| 0°-180°   | 5676.4 | 100.0     |



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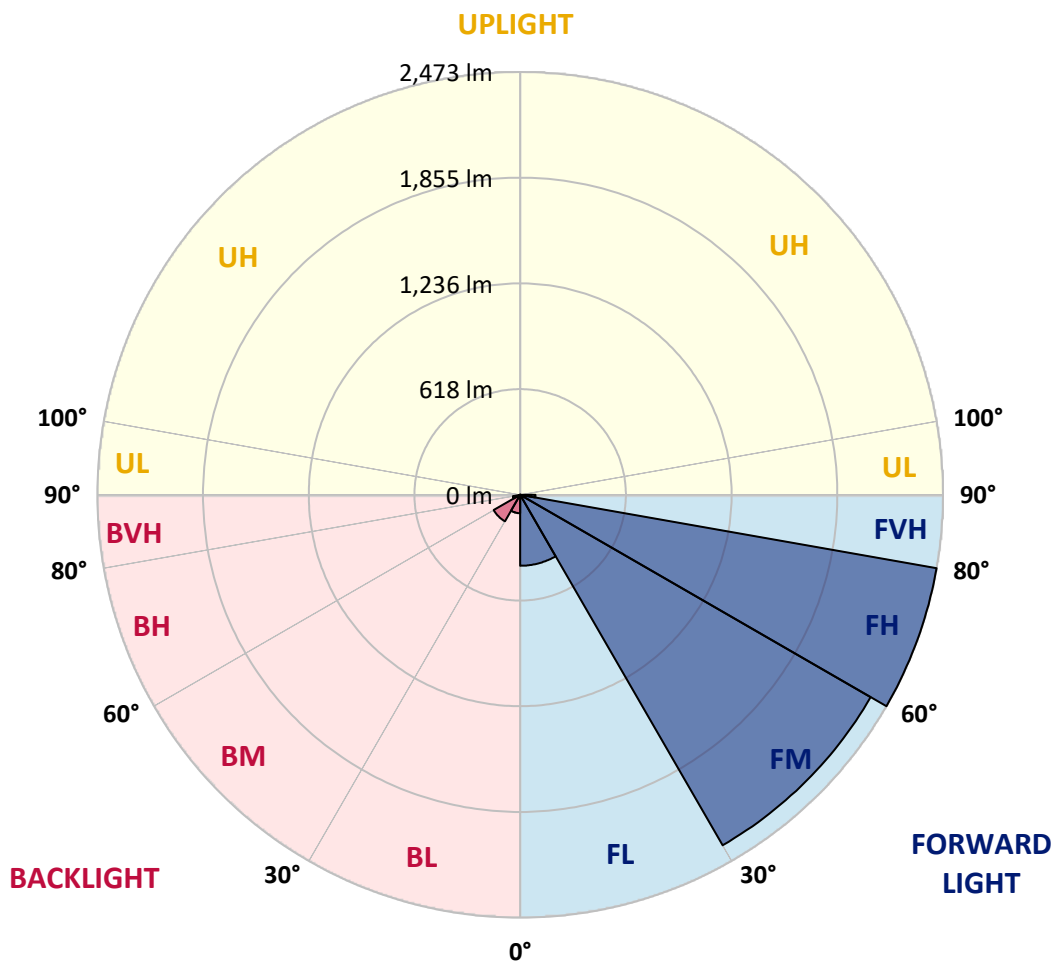
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 415.1  | 7.3       |                         |      |         |
| FM   | (30°-60°)   | 2366.7 | 41.7      |                         |      |         |
| FH   | (60°-80°)   | 2472.9 | 43.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 89.6   | 1.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 107.6  | 1.9       | B0/110                  |      |         |
| BM   | (30°-60°)   | 178.5  | 3.1       | B0/220                  |      |         |
| BH   | (60°-80°)   | 43.1   | 0.8       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 2.9    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 40°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 848.0  | 848.0  | 848.0  | 848.0  | 848.0  | 848.0  | 848.0  | 848.0  | 848.0  | 848.0  | 848.0  |
| 2.5°  | 931.2  | 926.1  | 923.1  | 919.0  | 914.0  | 909.6  | 907.9  | 895.4  | 883.5  | 867.4  | 848.7  |
| 5°    | 948.4  | 946.7  | 941.3  | 935.9  | 929.9  | 923.1  | 919.3  | 904.5  | 887.6  | 864.0  | 831.6  |
| 7.5°  | 950.1  | 948.1  | 941.3  | 933.9  | 925.5  | 917.4  | 910.9  | 896.1  | 880.6  | 856.5  | 817.0  |
| 10°   | 947.5  | 945.0  | 940.0  | 931.9  | 921.4  | 913.6  | 907.3  | 893.0  | 879.8  | 858.3  | 814.3  |
| 12.5° | 944.4  | 942.0  | 939.7  | 935.6  | 926.5  | 921.1  | 915.6  | 902.1  | 890.3  | 872.1  | 824.1  |
| 15°   | 947.5  | 946.0  | 948.8  | 947.0  | 942.0  | 937.2  | 931.9  | 919.7  | 908.9  | 893.6  | 842.0  |
| 17.5° | 960.2  | 960.2  | 968.7  | 969.8  | 964.9  | 958.2  | 950.4  | 938.3  | 929.1  | 916.4  | 863.3  |
| 20°   | 990.3  | 989.3  | 1000.1 | 1002.2 | 990.6  | 980.2  | 968.7  | 953.8  | 946.7  | 938.7  | 884.2  |
| 22.5° | 1042.0 | 1037.3 | 1043.7 | 1041.7 | 1019.1 | 1002.8 | 988.7  | 970.4  | 966.7  | 963.0  | 907.6  |
| 25°   | 1109.3 | 1106.5 | 1110.9 | 1091.0 | 1051.2 | 1029.2 | 1012.3 | 991.6  | 991.6  | 995.4  | 933.9  |
| 27.5° | 1206.9 | 1196.8 | 1181.9 | 1146.7 | 1087.0 | 1059.0 | 1040.6 | 1018.7 | 1024.5 | 1038.3 | 968.7  |
| 30°   | 1306.9 | 1295.8 | 1261.6 | 1207.6 | 1130.6 | 1101.1 | 1079.8 | 1056.9 | 1070.4 | 1095.8 | 1015.3 |
| 32.5° | 1405.5 | 1393.1 | 1344.8 | 1276.5 | 1193.1 | 1163.6 | 1143.0 | 1117.7 | 1140.4 | 1182.9 | 1083.6 |
| 35°   | 1501.2 | 1490.0 | 1434.3 | 1353.9 | 1276.1 | 1251.9 | 1233.0 | 1211.0 | 1240.0 | 1299.5 | 1179.9 |
| 37.5° | 1608.7 | 1596.5 | 1528.6 | 1441.4 | 1377.2 | 1359.6 | 1345.8 | 1323.8 | 1374.5 | 1461.7 | 1314.0 |
| 40°   | 1740.8 | 1720.1 | 1628.5 | 1541.8 | 1494.1 | 1485.6 | 1476.2 | 1473.2 | 1551.9 | 1672.5 | 1492.8 |
| 42.5° | 1892.2 | 1858.3 | 1733.3 | 1647.5 | 1622.5 | 1628.5 | 1626.2 | 1639.7 | 1773.9 | 1934.7 | 1710.4 |
| 45°   | 2043.4 | 1999.9 | 1849.9 | 1760.4 | 1763.8 | 1785.0 | 1798.1 | 1852.3 | 2051.9 | 2235.5 | 1944.5 |
| 47.5° | 2171.9 | 2129.0 | 1961.7 | 1882.3 | 1922.8 | 1964.8 | 2000.6 | 2103.0 | 2337.7 | 2531.4 | 2126.6 |
| 50°   | 2281.7 | 2241.2 | 2080.3 | 2016.4 | 2107.7 | 2175.3 | 2233.4 | 2385.1 | 2645.2 | 2756.8 | 2254.4 |
| 52.5° | 2371.6 | 2344.5 | 2203.3 | 2170.2 | 2318.8 | 2417.8 | 2503.1 | 2684.8 | 2917.6 | 2939.9 | 2353.7 |
| 55°   | 2459.1 | 2439.8 | 2335.4 | 2353.0 | 2566.9 | 2701.7 | 2809.4 | 3002.8 | 3152.1 | 3092.6 | 2448.9 |
| 57.5° | 2559.7 | 2542.2 | 2486.1 | 2584.8 | 2892.9 | 3062.5 | 3180.1 | 3284.5 | 3358.6 | 3248.7 | 2538.9 |
| 60°   | 2662.5 | 2652.3 | 2653.7 | 2842.3 | 3267.3 | 3430.2 | 3495.0 | 3522.0 | 3561.2 | 3395.7 | 2543.9 |
| 62.5° | 2760.4 | 2779.8 | 2845.2 | 3128.8 | 3625.7 | 3750.8 | 3783.6 | 3810.3 | 3764.4 | 3419.0 | 2350.3 |
| 65°   | 2926.4 | 2957.8 | 3114.3 | 3512.3 | 4020.1 | 4153.9 | 4187.7 | 4096.1 | 3796.4 | 3117.6 | 1911.7 |
| 67.5° | 3007.5 | 3064.9 | 3344.0 | 3869.7 | 4402.6 | 4551.2 | 4538.7 | 4114.7 | 3406.8 | 2377.3 | 1226.8 |
| 69°   | 2990.6 | 3051.8 | 3397.0 | 3979.2 | 4529.6 | 4664.5 | 4585.1 | 3887.3 | 2902.4 | 1722.1 | 753.1  |
| 70°   | 2923.7 | 2985.5 | 3369.7 | 3975.2 | 4545.8 | 4652.6 | 4499.2 | 3606.5 | 2454.1 | 1259.3 | 471.0  |
| 72.5° | 2441.5 | 2494.9 | 2991.6 | 3593.0 | 4187.7 | 4100.8 | 3763.9 | 2498.7 | 1195.7 | 343.0  | 106.1  |
| 75°   | 1502.9 | 1532.6 | 2146.6 | 2706.7 | 3162.9 | 2939.9 | 2507.8 | 1243.1 | 356.5  | 97.0   | 58.8   |
| 77.5° | 794.0  | 807.5  | 1175.2 | 1595.5 | 2005.0 | 1659.0 | 1285.3 | 484.9  | 164.2  | 60.9   | 42.6   |
| 80°   | 469.3  | 479.5  | 632.8  | 729.5  | 867.7  | 724.8  | 513.9  | 297.7  | 117.5  | 38.2   | 37.8   |
| 82.5° | 268.6  | 275.1  | 458.8  | 405.5  | 342.0  | 292.0  | 255.7  | 282.1  | 70.6   | 25.7   | 39.2   |
| 85°   | 98.6   | 100.0  | 258.1  | 308.5  | 203.4  | 120.9  | 127.1  | 233.8  | 18.9   | 16.3   | 30.8   |
| 87.5° | 45.9   | 44.9   | 132.8  | 188.8  | 119.0  | 76.7   | 99.0   | 51.4   | 7.5    | 10.4   | 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°    | 848.0  | 848.0 | 848.0 | 848.0 | 848.0 | 848.0 | 848.0 | 848.0 | 848.0 | 848.0 | 848.0 |
| 2.5°  | 837.9  | 825.4 | 802.8 | 779.5 | 755.9 | 737.5 | 719.6 | 705.5 | 700.7 | 692.0 | 692.6 |
| 5°    | 812.2  | 789.3 | 741.9 | 694.0 | 643.9 | 602.8 | 564.0 | 532.5 | 517.3 | 501.8 | 501.8 |
| 7.5°  | 789.9  | 756.5 | 682.5 | 604.5 | 523.8 | 455.8 | 394.7 | 348.7 | 323.4 | 303.1 | 302.7 |
| 10°   | 781.5  | 736.2 | 632.8 | 521.0 | 408.5 | 315.9 | 243.3 | 196.6 | 172.7 | 157.1 | 156.4 |
| 12.5° | 785.2  | 729.2 | 594.6 | 444.0 | 302.7 | 203.1 | 140.9 | 110.8 | 100.7 | 96.0  | 96.0  |
| 15°   | 796.1  | 727.1 | 556.5 | 368.7 | 213.9 | 127.1 | 93.6  | 85.5  | 84.8  | 84.8  | 84.8  |
| 17.5° | 809.3  | 727.8 | 517.3 | 295.3 | 145.7 | 90.9  | 80.7  | 79.8  | 80.4  | 80.4  | 80.4  |
| 20°   | 822.8  | 728.1 | 475.1 | 227.4 | 102.7 | 79.1  | 76.0  | 75.7  | 76.3  | 76.3  | 76.7  |
| 22.5° | 839.3  | 729.8 | 432.8 | 169.9 | 84.8  | 74.7  | 72.3  | 72.3  | 72.6  | 72.6  | 72.3  |
| 25°   | 858.3  | 733.1 | 388.9 | 126.0 | 77.3  | 71.6  | 69.6  | 69.3  | 69.6  | 69.3  | 68.9  |
| 27.5° | 881.9  | 738.0 | 339.9 | 98.6  | 74.0  | 68.6  | 66.9  | 66.9  | 66.6  | 66.2  | 65.9  |
| 30°   | 911.6  | 743.4 | 284.8 | 83.8  | 70.6  | 65.9  | 64.2  | 63.8  | 63.5  | 62.8  | 62.8  |
| 32.5° | 956.9  | 755.1 | 230.5 | 76.0  | 66.9  | 62.2  | 60.9  | 60.9  | 60.1  | 59.4  | 59.1  |
| 35°   | 1026.4 | 778.5 | 181.8 | 71.3  | 62.8  | 58.1  | 56.5  | 56.5  | 55.8  | 55.4  | 55.0  |
| 37.5° | 1122.8 | 814.0 | 141.3 | 66.9  | 58.8  | 53.7  | 52.1  | 51.7  | 51.0  | 50.3  | 50.0  |
| 40°   | 1250.9 | 857.8 | 111.2 | 62.8  | 54.7  | 49.3  | 48.0  | 47.3  | 45.9  | 44.9  | 44.9  |
| 42.5° | 1411.7 | 907.9 | 90.2  | 58.4  | 50.0  | 45.3  | 44.3  | 43.3  | 40.9  | 39.9  | 39.5  |
| 45°   | 1579.9 | 952.8 | 76.3  | 53.4  | 45.3  | 41.2  | 40.5  | 38.9  | 35.8  | 34.8  | 34.8  |
| 47.5° | 1701.3 | 963.3 | 67.2  | 48.7  | 40.9  | 36.8  | 36.5  | 33.5  | 30.8  | 30.1  | 29.8  |
| 50°   | 1776.9 | 942.6 | 59.8  | 43.9  | 36.8  | 32.7  | 31.7  | 28.0  | 26.4  | 25.7  | 25.4  |
| 52.5° | 1827.9 | 905.8 | 53.7  | 39.9  | 33.1  | 29.1  | 26.7  | 24.0  | 22.6  | 22.0  | 22.0  |
| 55°   | 1868.8 | 853.9 | 47.7  | 36.1  | 30.1  | 26.0  | 22.6  | 20.6  | 19.2  | 18.6  | 18.6  |
| 57.5° | 1880.3 | 783.2 | 41.5  | 33.1  | 27.0  | 23.0  | 19.2  | 17.9  | 16.3  | 15.9  | 15.9  |
| 60°   | 1796.8 | 655.8 | 36.8  | 29.4  | 24.3  | 19.9  | 16.9  | 15.2  | 13.5  | 13.2  | 12.9  |
| 62.5° | 1576.9 | 507.5 | 32.4  | 26.0  | 21.3  | 17.2  | 14.5  | 12.5  | 11.2  | 11.2  | 11.2  |
| 65°   | 1202.9 | 340.2 | 28.3  | 22.6  | 18.6  | 14.5  | 12.5  | 10.1  | 9.4   | 9.4   | 9.8   |
| 67.5° | 720.1  | 185.2 | 24.3  | 19.2  | 15.9  | 12.2  | 10.4  | 8.8   | 8.5   | 8.8   | 8.8   |
| 69°   | 422.0  | 108.8 | 22.0  | 17.2  | 13.8  | 10.8  | 9.1   | 7.8   | 8.5   | 8.8   | 8.8   |
| 70°   | 260.5  | 73.3  | 20.3  | 15.5  | 12.5  | 9.8   | 8.5   | 7.5   | 8.1   | 8.5   | 8.5   |
| 72.5° | 72.6   | 37.8  | 16.3  | 12.2  | 10.1  | 8.1   | 6.8   | 6.8   | 7.8   | 8.1   | 8.1   |
| 75°   | 47.3   | 28.0  | 12.5  | 9.1   | 7.8   | 6.4   | 5.7   | 6.4   | 7.5   | 7.8   | 7.8   |
| 77.5° | 39.2   | 23.0  | 10.1  | 7.5   | 6.4   | 6.0   | 5.4   | 5.7   | 6.8   | 7.1   | 7.1   |
| 80°   | 35.8   | 16.3  | 8.1   | 6.8   | 5.7   | 5.4   | 5.1   | 4.7   | 6.0   | 6.4   | 6.4   |
| 82.5° | 34.2   | 12.9  | 7.1   | 6.0   | 5.4   | 4.7   | 4.4   | 4.7   | 5.4   | 5.7   | 6.0   |
| 85°   | 21.3   | 8.5   | 6.4   | 5.7   | 4.7   | 4.4   | 4.4   | 4.4   | 5.1   | 5.4   | 5.4   |
| 87.5° | 7.8    | 6.8   | 5.7   | 4.7   | 4.1   | 4.1   | 4.1   | 4.1   | 4.4   | 5.1   | 5.1   |
| 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)