

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: P397896

Luminaire Tested: **ARCH-S-PA1-60-727-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397896  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-60-727-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5855 lumens  
Efficiency: N/A  
Efficacy: 91.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B0 - U0 - G1

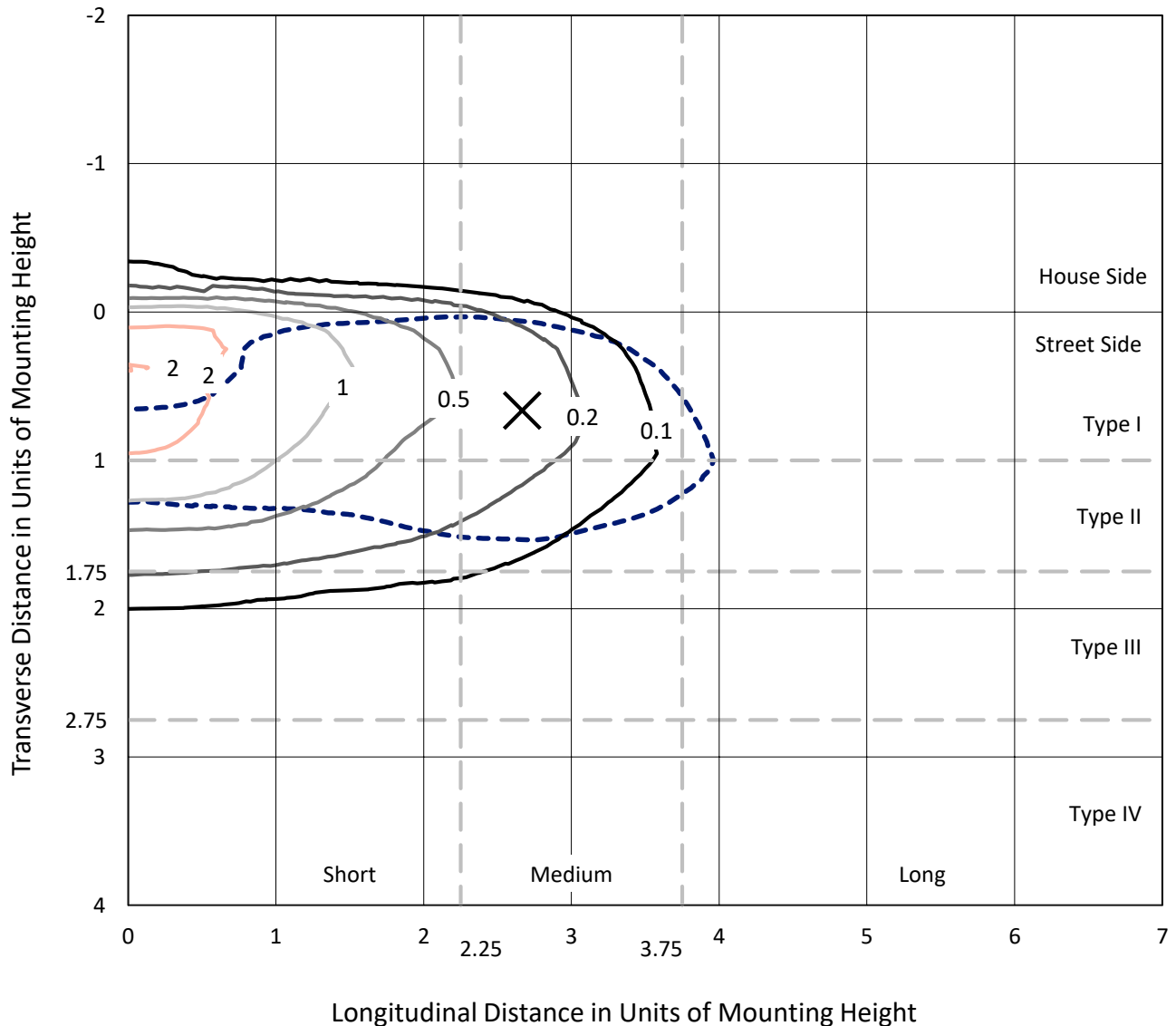
Input Watts (W): 64  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

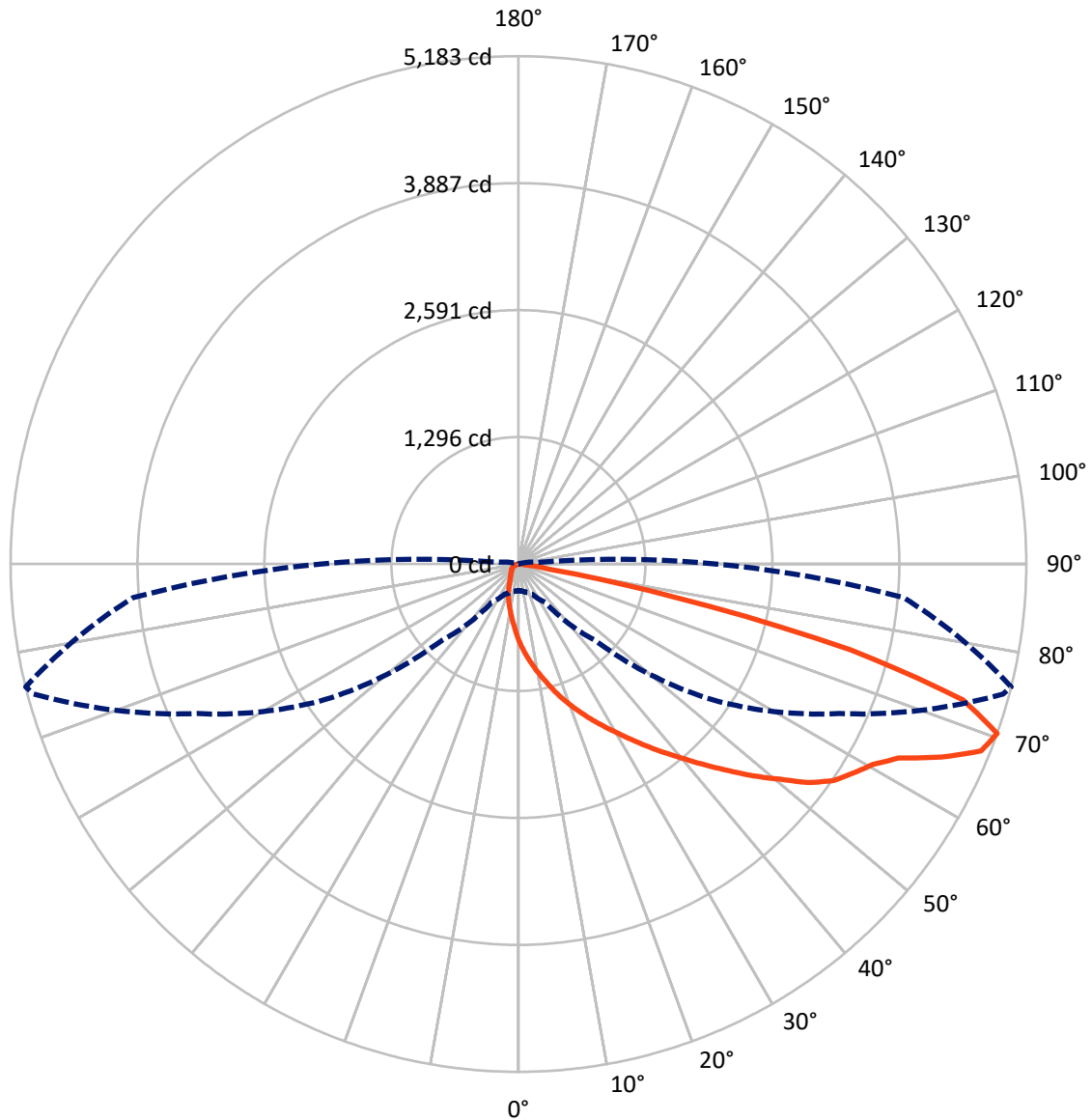
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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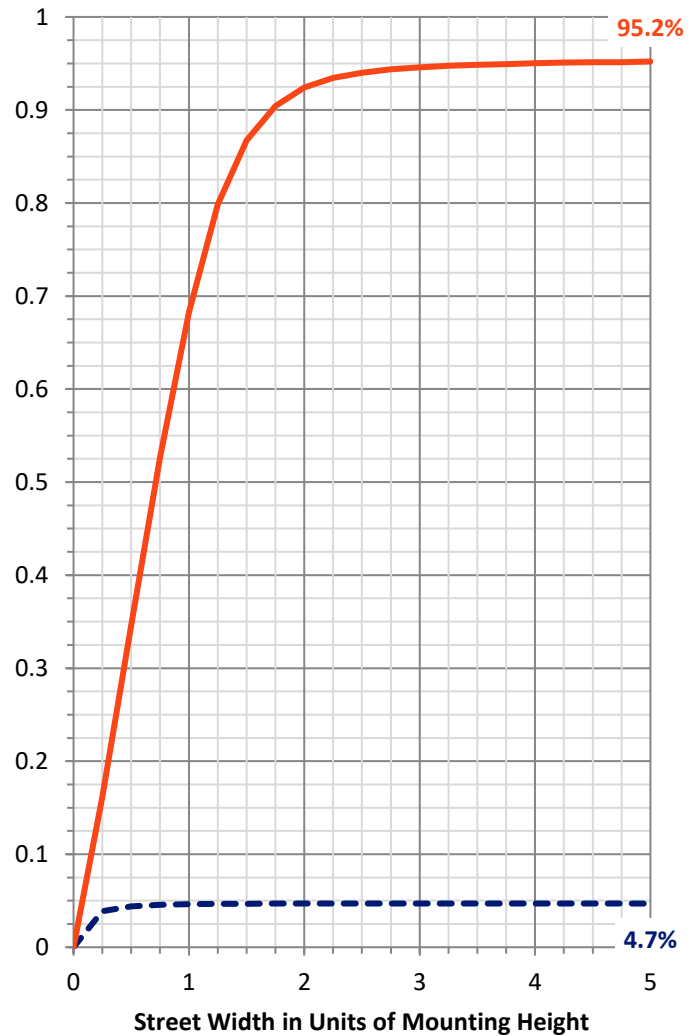
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 276.1    | 0.0    | 276.1  |
|                    | % Fixture | 4.7      | 0.0    | 4.7    |
| <b>Street Side</b> | Lumens    | 5578.9   | 0.0    | 5578.9 |
|                    | % Fixture | 95.3     | 0.0    | 95.3   |
| <b>Total</b>       | Lumens    | 5855.0   | 0.0    | 5855.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 73.8   | 1.3       |
| 10°-20°   | 238.3  | 4.1       |
| 20°-30°   | 443.8  | 7.6       |
| 30°-40°   | 785.0  | 13.4      |
| 40°-50°   | 1200.4 | 20.5      |
| 50°-60°   | 1361.0 | 23.2      |
| 60°-70°   | 1166.7 | 19.9      |
| 70°-80°   | 565.1  | 9.7       |
| 80°-90°   | 21.0   | 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°    | 5855.0 | 100.0     |
| 0°-180°   | 5855.0 | 100.0     |

**Coefficient of Utilization**



--- HS    — SS

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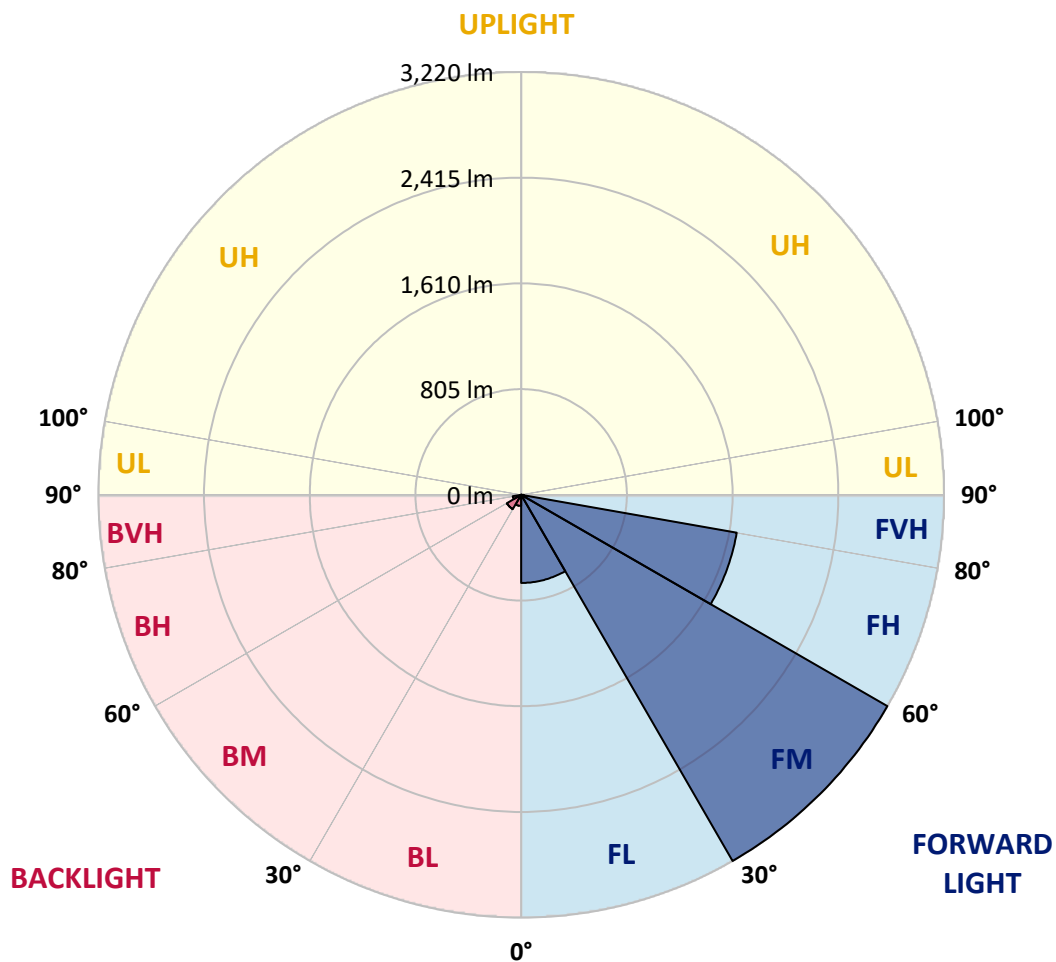
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 671.2  | 11.5      |                         |      |         |
| FM   | (30°-60°)   | 3220.3 | 55.0      |                         |      |         |
| FH   | (60°-80°)   | 1666.7 | 28.5      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 20.6   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 84.7   | 1.4       | B0/110                  |      |         |
| BM   | (30°-60°)   | 126.0  | 2.2       | B0/220                  |      |         |
| BH   | (60°-80°)   | 65.0   | 1.1       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.4    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G1**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 76°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 783.7  | 783.7  | 783.7  | 783.7  | 783.7  | 783.7  | 783.7  | 783.7  | 783.7  | 783.7  | 783.7  |
| 2.5°  | 1071.3 | 1065.4 | 1059.6 | 1037.2 | 1016.7 | 998.2  | 963.1  | 917.3  | 876.3  | 867.6  | 819.8  |
| 5°    | 1258.5 | 1251.6 | 1242.9 | 1220.4 | 1194.1 | 1162.9 | 1111.3 | 1041.1 | 968.9  | 953.3  | 864.6  |
| 7.5°  | 1385.2 | 1379.3 | 1366.7 | 1355.9 | 1329.6 | 1299.4 | 1241.9 | 1160.0 | 1060.6 | 1041.1 | 916.3  |
| 10°   | 1471.9 | 1468.0 | 1466.1 | 1457.3 | 1437.8 | 1413.4 | 1355.9 | 1270.1 | 1153.2 | 1130.8 | 970.9  |
| 12.5° | 1503.1 | 1503.1 | 1512.9 | 1527.5 | 1530.4 | 1522.6 | 1470.0 | 1384.2 | 1250.7 | 1227.3 | 1035.2 |
| 15°   | 1461.2 | 1466.1 | 1487.5 | 1534.3 | 1583.1 | 1615.2 | 1582.1 | 1502.1 | 1357.9 | 1332.5 | 1111.3 |
| 17.5° | 1449.5 | 1454.4 | 1469.0 | 1509.9 | 1575.3 | 1661.0 | 1677.6 | 1616.2 | 1459.3 | 1437.8 | 1189.2 |
| 20°   | 1482.7 | 1487.5 | 1500.2 | 1535.3 | 1585.0 | 1671.8 | 1741.0 | 1726.3 | 1566.5 | 1544.1 | 1268.2 |
| 22.5° | 1561.6 | 1564.5 | 1564.5 | 1591.8 | 1635.7 | 1700.0 | 1780.9 | 1830.7 | 1676.6 | 1652.3 | 1346.2 |
| 25°   | 1731.2 | 1725.4 | 1702.0 | 1688.3 | 1716.6 | 1769.2 | 1831.6 | 1922.3 | 1799.5 | 1766.3 | 1430.0 |
| 27.5° | 1953.5 | 1973.0 | 1916.4 | 1851.1 | 1829.7 | 1859.9 | 1902.8 | 2003.2 | 1918.4 | 1883.3 | 1506.0 |
| 30°   | 2254.7 | 2246.9 | 2172.8 | 2079.2 | 1986.6 | 1975.9 | 1990.5 | 2072.4 | 2037.3 | 2004.2 | 1590.9 |
| 32.5° | 2502.3 | 2516.9 | 2438.9 | 2324.9 | 2186.4 | 2121.1 | 2105.5 | 2155.3 | 2164.0 | 2142.6 | 1691.3 |
| 35°   | 2756.7 | 2772.3 | 2696.3 | 2569.5 | 2404.8 | 2295.6 | 2250.8 | 2257.6 | 2321.0 | 2293.7 | 1796.5 |
| 37.5° | 2984.8 | 2998.4 | 2923.4 | 2793.7 | 2629.0 | 2495.5 | 2431.1 | 2378.5 | 2473.0 | 2448.7 | 1907.7 |
| 40°   | 3158.3 | 3160.3 | 3109.6 | 2993.6 | 2837.6 | 2699.2 | 2626.1 | 2522.8 | 2633.9 | 2617.3 | 2023.7 |
| 42.5° | 3281.1 | 3285.0 | 3248.0 | 3148.6 | 3004.3 | 2875.6 | 2816.2 | 2693.3 | 2819.1 | 2804.5 | 2158.2 |
| 45°   | 3338.6 | 3345.5 | 3341.6 | 3249.9 | 3130.0 | 3018.9 | 2999.4 | 2874.6 | 3021.8 | 3008.2 | 2313.2 |
| 47.5° | 3284.1 | 3284.1 | 3333.8 | 3321.1 | 3211.0 | 3136.9 | 3159.3 | 3063.8 | 3242.1 | 3229.5 | 2471.1 |
| 50°   | 3056.9 | 3059.9 | 3161.2 | 3306.5 | 3242.1 | 3225.6 | 3295.8 | 3249.0 | 3442.0 | 3449.8 | 2660.2 |
| 52.5° | 2460.4 | 2455.5 | 2797.6 | 3076.4 | 3220.7 | 3265.5 | 3421.5 | 3438.1 | 3681.8 | 3705.2 | 2848.3 |
| 55°   | 1838.4 | 1835.5 | 2163.1 | 2669.0 | 3070.6 | 3245.1 | 3491.7 | 3606.7 | 3886.5 | 3901.1 | 2988.7 |
| 57.5° | 1455.4 | 1447.6 | 1627.9 | 2151.4 | 2731.4 | 3153.4 | 3494.6 | 3638.9 | 4000.5 | 4025.9 | 3125.2 |
| 60°   | 1119.1 | 1112.2 | 1246.8 | 1600.6 | 2250.8 | 2909.7 | 3410.8 | 3640.8 | 4110.7 | 4155.5 | 3308.4 |
| 62.5° | 800.3  | 808.1  | 911.4  | 1148.3 | 1731.2 | 2565.6 | 3301.6 | 3668.1 | 4306.6 | 4357.3 | 3568.7 |
| 65°   | 540.0  | 536.1  | 621.9  | 781.8  | 1231.2 | 2102.6 | 3133.9 | 3725.6 | 4659.5 | 4748.2 | 3880.6 |
| 67.5° | 375.3  | 378.2  | 417.2  | 508.8  | 781.8  | 1614.2 | 2855.2 | 3757.8 | 5024.1 | 5093.3 | 4099.0 |
| 70°   | 271.0  | 274.9  | 296.3  | 342.2  | 477.6  | 1094.7 | 2413.6 | 3610.6 | 5122.5 | 5182.9 | 3946.9 |
| 72.5° | 178.4  | 186.2  | 218.4  | 242.7  | 305.1  | 685.3  | 1778.0 | 3110.5 | 4698.5 | 4743.3 | 3311.4 |
| 75°   | 96.5   | 98.5   | 140.4  | 181.3  | 217.4  | 427.0  | 1060.6 | 2097.7 | 3515.1 | 3500.5 | 2183.5 |
| 77.5° | 75.1   | 78.0   | 86.8   | 129.6  | 146.2  | 234.9  | 419.2  | 947.5  | 1664.9 | 1620.1 | 744.7  |
| 80°   | 45.8   | 47.8   | 60.4   | 77.0   | 102.4  | 136.5  | 122.8  | 257.3  | 338.3  | 316.8  | 109.2  |
| 82.5° | 27.3   | 29.2   | 36.1   | 64.3   | 80.9   | 64.3   | 42.9   | 62.4   | 63.4   | 62.4   | 27.3   |
| 85°   | 4.9    | 4.9    | 25.3   | 44.8   | 42.9   | 18.5   | 25.3   | 20.5   | 18.5   | 19.5   | 5.8    |
| 87.5° | 0.0    | 0.0    | 9.7    | 13.6   | 19.5   | 6.8    | 9.7    | 4.9    | 4.9    | 4.9    | 2.9    |
| 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°    | 783.7  | 783.7 | 783.7 | 783.7 | 783.7 | 783.7 | 783.7 | 783.7 | 783.7 | 783.7 | 783.7 |
| 2.5°  | 790.6  | 757.4 | 689.2 | 629.7 | 570.3 | 526.4 | 493.2 | 459.1 | 447.4 | 432.8 | 425.0 |
| 5°    | 804.2  | 738.9 | 603.4 | 495.2 | 403.6 | 333.4 | 288.5 | 261.2 | 243.7 | 231.0 | 228.1 |
| 7.5°  | 824.7  | 724.3 | 534.2 | 388.0 | 287.6 | 217.4 | 180.3 | 161.8 | 152.1 | 146.2 | 144.3 |
| 10°   | 849.0  | 711.6 | 465.9 | 302.2 | 202.8 | 153.0 | 132.6 | 124.8 | 120.9 | 118.9 | 117.9 |
| 12.5° | 883.2  | 706.7 | 408.4 | 233.0 | 153.0 | 125.7 | 115.0 | 110.2 | 107.2 | 104.3 | 103.3 |
| 15°   | 928.0  | 708.7 | 355.8 | 180.3 | 126.7 | 112.1 | 103.3 | 98.5  | 94.6  | 91.6  | 91.6  |
| 17.5° | 974.8  | 711.6 | 304.1 | 146.2 | 115.0 | 102.4 | 92.6  | 85.8  | 82.9  | 79.9  | 79.0  |
| 20°   | 1018.7 | 710.6 | 254.4 | 124.8 | 104.3 | 91.6  | 81.9  | 75.1  | 70.2  | 67.3  | 67.3  |
| 22.5° | 1060.6 | 704.8 | 207.6 | 112.1 | 95.5  | 80.9  | 70.2  | 63.4  | 59.5  | 56.5  | 56.5  |
| 25°   | 1105.4 | 693.1 | 169.6 | 102.4 | 84.8  | 71.2  | 60.4  | 53.6  | 50.7  | 47.8  | 47.8  |
| 27.5° | 1140.5 | 673.6 | 138.4 | 93.6  | 75.1  | 61.4  | 51.7  | 45.8  | 42.9  | 40.9  | 40.9  |
| 30°   | 1178.5 | 645.3 | 115.0 | 83.8  | 65.3  | 52.6  | 43.9  | 39.0  | 36.1  | 35.1  | 35.1  |
| 32.5° | 1220.4 | 614.1 | 98.5  | 74.1  | 55.6  | 44.8  | 37.0  | 34.1  | 31.2  | 30.2  | 30.2  |
| 35°   | 1269.2 | 586.8 | 88.7  | 64.3  | 48.7  | 38.0  | 32.2  | 29.2  | 27.3  | 27.3  | 27.3  |
| 37.5° | 1324.7 | 558.6 | 79.9  | 56.5  | 41.9  | 32.2  | 27.3  | 26.3  | 25.3  | 24.4  | 24.4  |
| 40°   | 1385.2 | 528.3 | 72.1  | 49.7  | 36.1  | 27.3  | 23.4  | 23.4  | 22.4  | 22.4  | 22.4  |
| 42.5° | 1453.4 | 502.0 | 65.3  | 43.9  | 31.2  | 23.4  | 20.5  | 20.5  | 19.5  | 19.5  | 19.5  |
| 45°   | 1527.5 | 477.6 | 59.5  | 39.0  | 27.3  | 20.5  | 18.5  | 17.5  | 16.6  | 16.6  | 16.6  |
| 47.5° | 1615.2 | 464.0 | 54.6  | 34.1  | 23.4  | 17.5  | 15.6  | 14.6  | 13.6  | 12.7  | 12.7  |
| 50°   | 1727.3 | 469.8 | 49.7  | 28.3  | 20.5  | 14.6  | 12.7  | 11.7  | 10.7  | 9.7   | 9.7   |
| 52.5° | 1816.0 | 466.9 | 42.9  | 24.4  | 16.6  | 11.7  | 9.7   | 8.8   | 7.8   | 6.8   | 6.8   |
| 55°   | 1880.4 | 455.2 | 37.0  | 20.5  | 12.7  | 9.7   | 7.8   | 5.8   | 4.9   | 4.9   | 4.9   |
| 57.5° | 1943.7 | 443.5 | 31.2  | 16.6  | 9.7   | 6.8   | 4.9   | 3.9   | 3.9   | 3.9   | 3.9   |
| 60°   | 2042.2 | 427.0 | 27.3  | 13.6  | 7.8   | 4.9   | 2.9   | 2.9   | 1.9   | 1.9   | 1.9   |
| 62.5° | 2162.1 | 406.5 | 22.4  | 11.7  | 5.8   | 3.9   | 1.9   | 1.9   | 0.0   | 0.0   | 0.0   |
| 65°   | 2293.7 | 370.4 | 18.5  | 8.8   | 4.9   | 2.9   | 1.9   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 2263.5 | 297.3 | 15.6  | 5.8   | 3.9   | 1.9   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 2002.2 | 200.8 | 12.7  | 4.9   | 2.9   | 1.9   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 1568.4 | 118.9 | 8.8   | 3.9   | 1.9   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 1004.0 | 59.5  | 5.8   | 2.9   | 1.9   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 336.3  | 29.2  | 3.9   | 1.9   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 47.8   | 9.7   | 1.9   | 1.0   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 10.7   | 3.9   | 1.0   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 3.9    | 1.9   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 1.9    | 1.0   | 0.0   | 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)