

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: P573277

Luminaire Tested: **ARCH-S-PA2-50-830-U-T2U**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573277  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-50-830-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6292 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

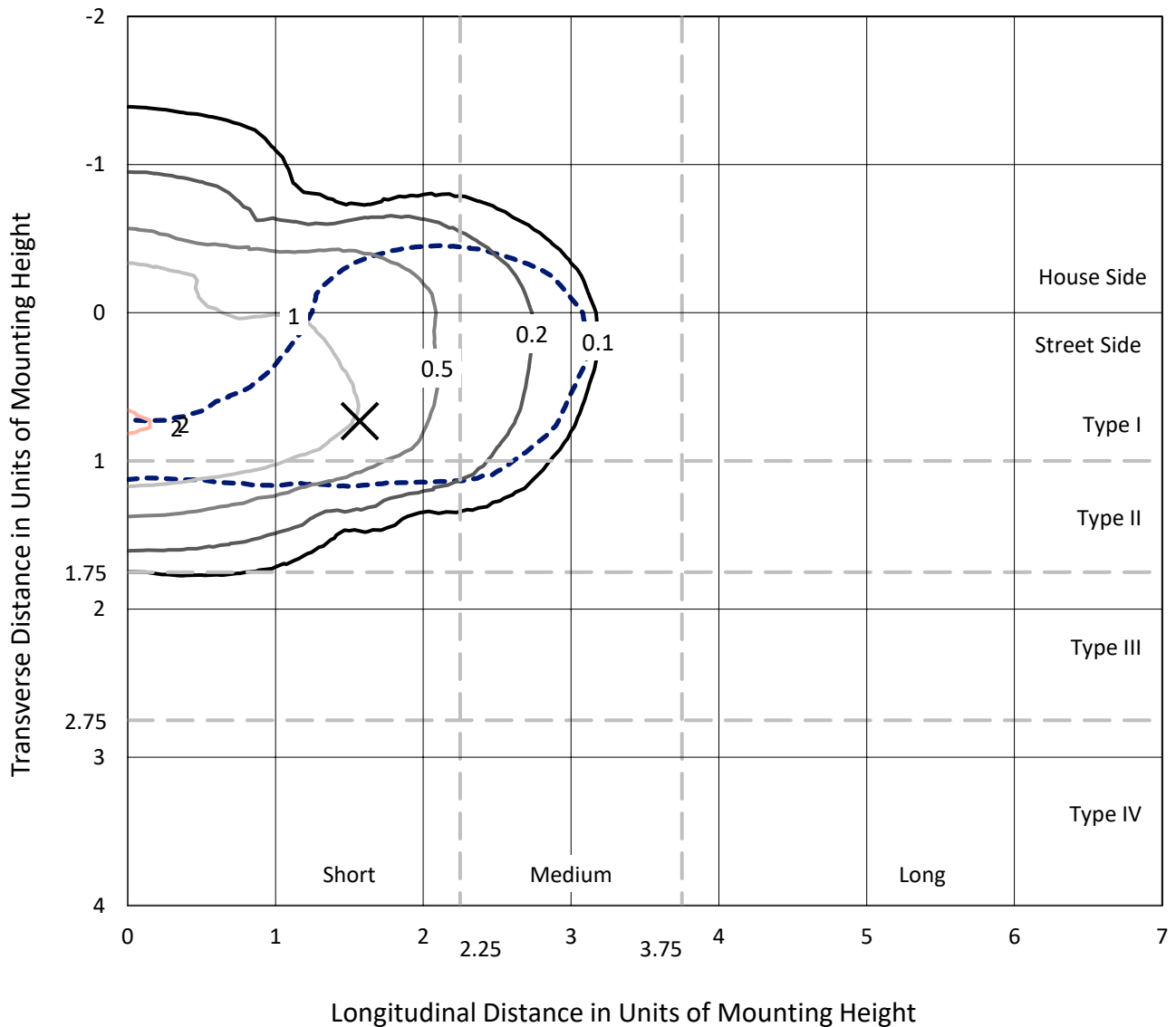
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

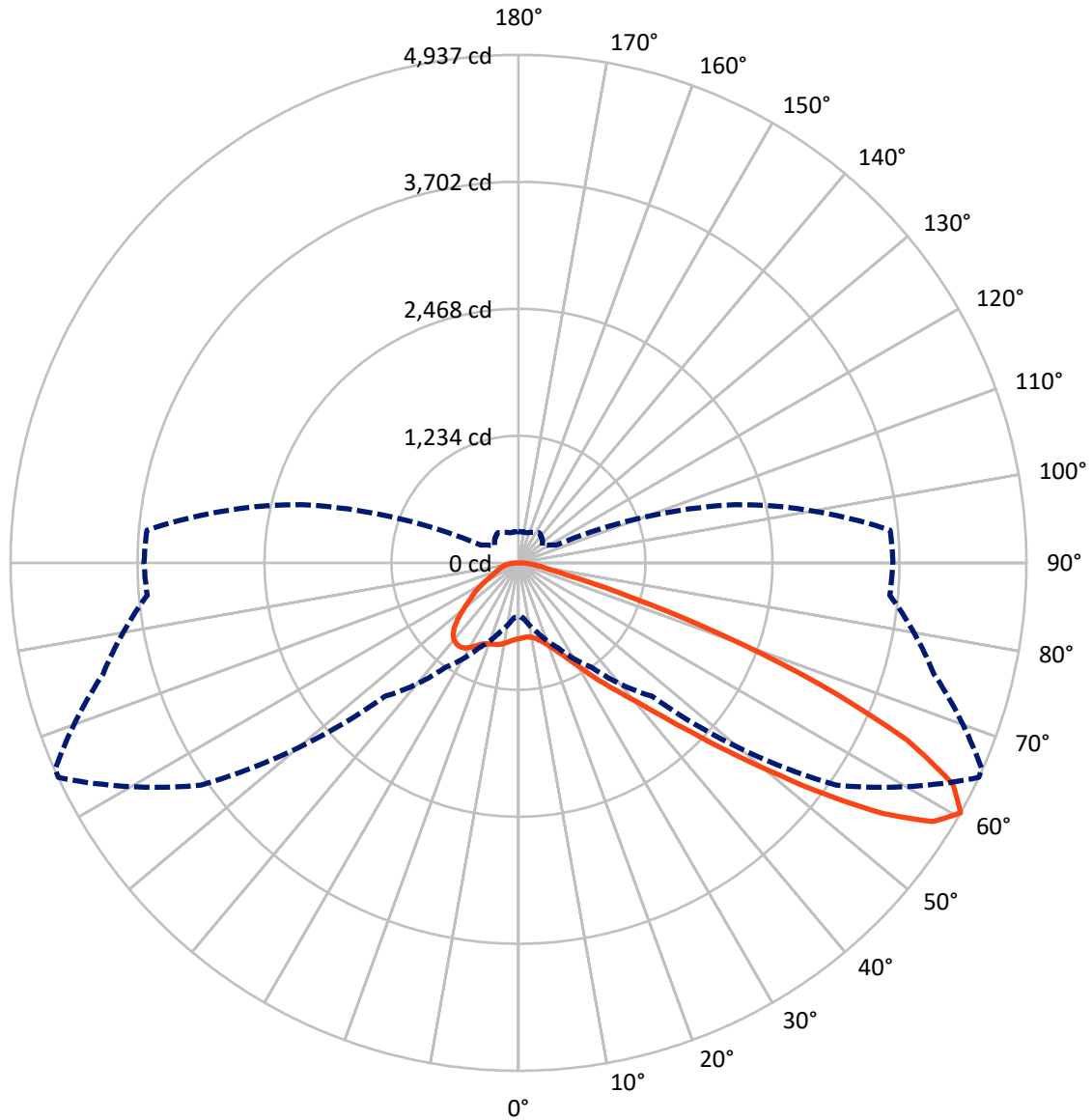
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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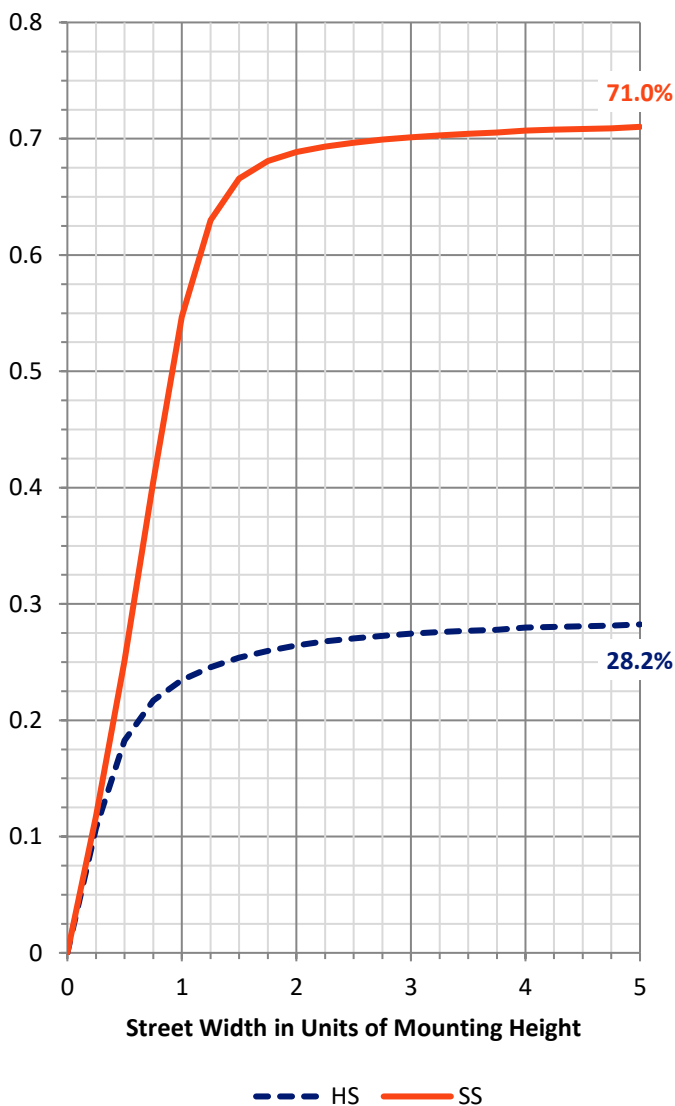
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1801.2   | 0.0    | 1801.2 |
|                    | % Fixture | 28.6     | 0.0    | 28.6   |
| <b>Street Side</b> | Lumens    | 4490.8   | 0.0    | 4490.8 |
|                    | % Fixture | 71.4     | 0.0    | 71.4   |
| <b>Total</b>       | Lumens    | 6292.0   | 0.0    | 6292.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 71.3   | 1.1       |
| 10°-20°   | 229.6  | 3.6       |
| 20°-30°   | 440.1  | 7.0       |
| 30°-40°   | 764.3  | 12.1      |
| 40°-50°   | 1296.2 | 20.6      |
| 50°-60°   | 1614.0 | 25.7      |
| 60°-70°   | 1300.6 | 20.7      |
| 70°-80°   | 492.5  | 7.8       |
| 80°-90°   | 83.5   | 1.3       |
| 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°    | 6292.0 | 100.0     |
| 0°-180°   | 6292.0 | 100.0     |

**Coefficient of Utilization**

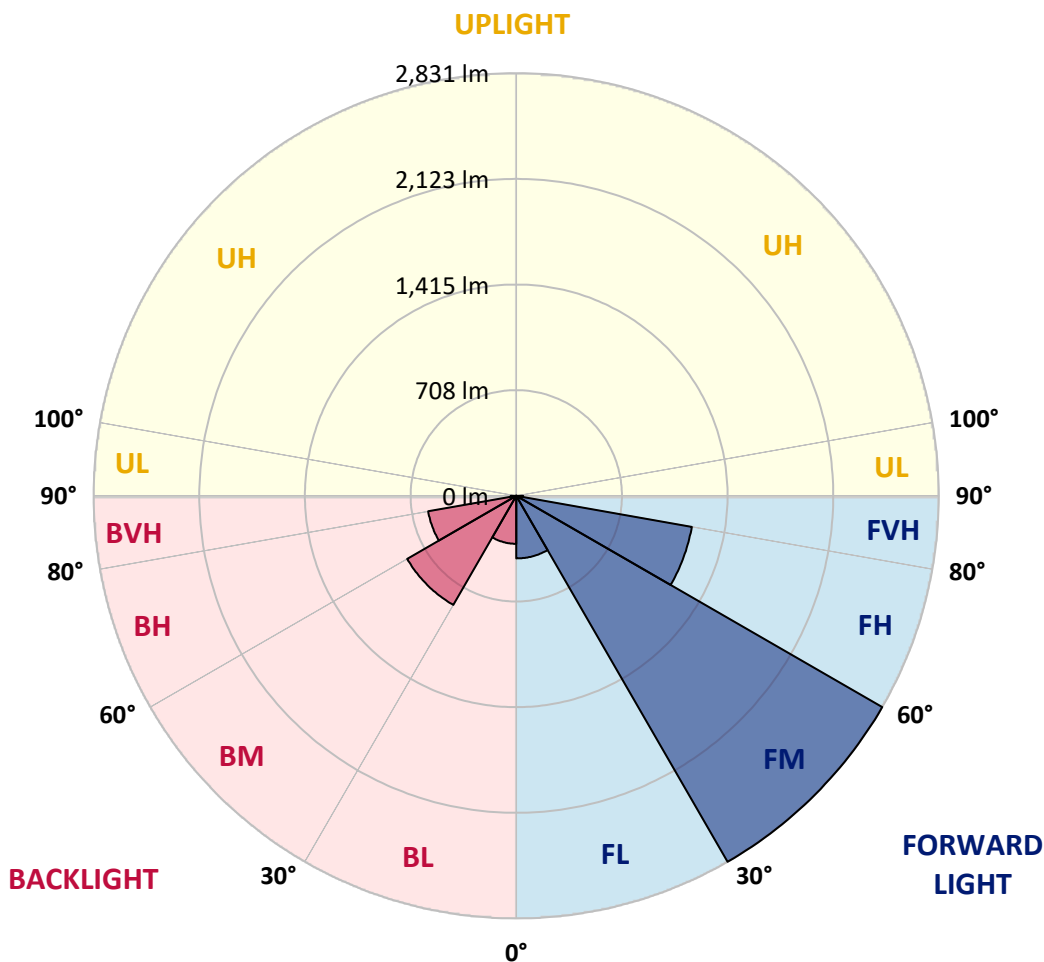


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 419.5  | 6.7       |                         |      |         |
| FM (30°-60°)   | 2830.8 | 45.0      |                         |      |         |
| FH (60°-80°)   | 1194.2 | 19.0      |                         |      | G1/1800 |
| FVH (80°-90°)  | 46.3   | 0.7       |                         |      | G1/100  |
| BL (0°-30°)    | 321.5  | 5.1       | B1/500                  |      |         |
| BM (30°-60°)   | 843.7  | 13.4      | B1/1000                 |      |         |
| BH (60°-80°)   | 598.9  | 9.5       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 37.2   | 0.6       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 738.2  | 738.2  | 738.2  | 738.2  | 738.2  | 738.2  | 738.2  | 738.2  | 738.2  | 738.2  | 738.2  |
| 2.5°  | 721.0  | 721.0  | 721.0  | 722.7  | 724.4  | 726.2  | 729.6  | 729.6  | 729.6  | 731.3  | 734.8  |
| 5°    | 707.2  | 705.5  | 707.2  | 708.9  | 712.4  | 715.8  | 722.7  | 726.2  | 726.2  | 733.1  | 740.0  |
| 7.5°  | 708.9  | 705.5  | 705.5  | 707.2  | 710.6  | 714.1  | 721.0  | 726.2  | 727.9  | 736.5  | 748.6  |
| 10°   | 726.2  | 721.0  | 721.0  | 722.7  | 722.7  | 726.2  | 731.3  | 738.2  | 740.0  | 748.6  | 760.7  |
| 12.5° | 762.4  | 757.2  | 755.5  | 750.3  | 745.1  | 748.6  | 753.8  | 755.5  | 757.2  | 762.4  | 774.5  |
| 15°   | 838.3  | 829.7  | 815.9  | 805.5  | 791.7  | 783.1  | 781.4  | 783.1  | 783.1  | 784.8  | 791.7  |
| 17.5° | 946.9  | 936.6  | 915.9  | 893.5  | 860.7  | 833.1  | 824.5  | 817.6  | 817.6  | 812.4  | 812.4  |
| 20°   | 1079.8 | 1064.2 | 1040.1 | 1007.3 | 959.0  | 909.0  | 879.7  | 864.2  | 859.0  | 850.4  | 838.3  |
| 22.5° | 1233.3 | 1222.9 | 1191.9 | 1141.9 | 1069.4 | 1002.1 | 953.8  | 919.4  | 919.4  | 898.7  | 872.8  |
| 25°   | 1414.4 | 1395.4 | 1359.2 | 1300.5 | 1202.2 | 1105.6 | 1040.1 | 990.1  | 984.9  | 952.1  | 910.7  |
| 27.5° | 1590.3 | 1578.2 | 1533.4 | 1455.8 | 1338.5 | 1226.4 | 1135.0 | 1076.3 | 1067.7 | 1015.9 | 952.1  |
| 30°   | 1804.2 | 1790.4 | 1723.1 | 1614.5 | 1488.6 | 1360.9 | 1254.0 | 1178.1 | 1169.5 | 1098.7 | 1009.0 |
| 32.5° | 2069.8 | 2023.3 | 1940.5 | 1816.3 | 1654.1 | 1511.0 | 1388.5 | 1307.4 | 1297.1 | 1216.0 | 1109.1 |
| 35°   | 2392.4 | 2352.7 | 2209.5 | 2078.5 | 1885.3 | 1697.3 | 1550.7 | 1443.7 | 1429.9 | 1333.3 | 1198.8 |
| 37.5° | 2620.1 | 2601.1 | 2502.8 | 2399.3 | 2178.5 | 1924.9 | 1745.6 | 1597.2 | 1583.4 | 1455.8 | 1281.6 |
| 40°   | 2763.2 | 2744.3 | 2716.7 | 2687.3 | 2564.9 | 2278.5 | 1980.1 | 1778.3 | 1755.9 | 1635.2 | 1447.2 |
| 42.5° | 2837.4 | 2821.9 | 2827.0 | 2885.7 | 2920.2 | 2875.3 | 2314.8 | 2019.8 | 2004.3 | 1857.7 | 1649.0 |
| 45°   | 2794.3 | 2783.9 | 2833.9 | 2989.2 | 3158.2 | 3489.4 | 2744.3 | 2337.2 | 2295.8 | 2121.6 | 1893.9 |
| 47.5° | 2587.3 | 2556.2 | 2673.5 | 2937.4 | 3299.7 | 3782.6 | 3261.7 | 2728.7 | 2683.9 | 2433.8 | 2142.3 |
| 50°   | 2161.3 | 2152.6 | 2313.0 | 2647.7 | 3244.5 | 3898.2 | 3815.4 | 3191.0 | 3158.2 | 2770.1 | 2418.3 |
| 52.5° | 1764.5 | 1761.1 | 1885.3 | 2192.3 | 2892.6 | 3817.1 | 4217.3 | 3741.2 | 3642.9 | 3108.2 | 2718.4 |
| 55°   | 1369.5 | 1367.8 | 1478.2 | 1707.6 | 2307.9 | 3435.9 | 4407.0 | 4301.8 | 4229.4 | 3477.3 | 3027.1 |
| 57.5° | 936.6  | 924.5  | 1067.7 | 1241.9 | 1733.5 | 2721.8 | 4282.8 | 4745.1 | 4700.2 | 3868.9 | 3354.9 |
| 60°   | 520.9  | 538.2  | 696.8  | 912.5  | 1240.2 | 1833.5 | 3765.4 | 4936.6 | 4929.7 | 4181.1 | 3622.2 |
| 62.5° | 369.1  | 376.0  | 443.3  | 648.5  | 815.9  | 1050.4 | 2904.7 | 4738.2 | 4793.4 | 4353.6 | 3774.0 |
| 65°   | 307.0  | 310.5  | 343.2  | 479.5  | 596.8  | 607.2  | 1811.1 | 4150.0 | 4222.5 | 4300.1 | 3806.8 |
| 67.5° | 289.8  | 291.5  | 308.8  | 353.6  | 467.4  | 439.8  | 809.0  | 3168.6 | 3322.1 | 3868.9 | 3592.9 |
| 70°   | 263.9  | 265.6  | 291.5  | 312.2  | 377.7  | 346.7  | 415.7  | 2104.3 | 2311.3 | 3058.2 | 3097.9 |
| 72.5° | 226.0  | 231.1  | 251.8  | 293.2  | 307.0  | 288.1  | 320.8  | 1124.6 | 1329.9 | 2045.7 | 2392.4 |
| 75°   | 194.9  | 198.4  | 213.9  | 248.4  | 288.1  | 229.4  | 272.5  | 512.3  | 600.3  | 1200.5 | 1514.4 |
| 77.5° | 157.0  | 158.7  | 181.1  | 203.5  | 241.5  | 186.3  | 212.2  | 307.0  | 322.5  | 586.5  | 684.8  |
| 80°   | 119.0  | 119.0  | 134.5  | 162.1  | 179.4  | 179.4  | 155.2  | 213.9  | 222.5  | 279.4  | 270.8  |
| 82.5° | 91.4   | 89.7   | 101.8  | 113.8  | 129.4  | 150.1  | 117.3  | 141.4  | 144.9  | 169.0  | 144.9  |
| 85°   | 60.4   | 60.4   | 67.3   | 77.6   | 86.2   | 82.8   | 91.4   | 82.8   | 86.2   | 105.2  | 79.3   |
| 87.5° | 25.9   | 25.9   | 36.2   | 34.5   | 37.9   | 39.7   | 44.8   | 39.7   | 39.7   | 48.3   | 36.2   |
| 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°    | 738.2  | 738.2  | 738.2  | 738.2 | 738.2 | 738.2 | 738.2 | 738.2 | 738.2 | 738.2 | 738.2 |
| 2.5°  | 736.5  | 738.2  | 741.7  | 743.4 | 748.6 | 750.3 | 750.3 | 753.8 | 753.8 | 757.2 | 757.2 |
| 5°    | 741.7  | 746.9  | 752.0  | 757.2 | 762.4 | 764.1 | 767.6 | 769.3 | 769.3 | 772.7 | 771.0 |
| 7.5°  | 752.0  | 757.2  | 767.6  | 772.7 | 779.6 | 783.1 | 781.4 | 783.1 | 781.4 | 783.1 | 783.1 |
| 10°   | 765.8  | 772.7  | 784.8  | 791.7 | 796.9 | 798.6 | 793.4 | 788.3 | 781.4 | 781.4 | 781.4 |
| 12.5° | 781.4  | 786.5  | 802.1  | 807.2 | 810.7 | 805.5 | 791.7 | 781.4 | 776.2 | 777.9 | 776.2 |
| 15°   | 796.9  | 802.1  | 814.1  | 819.3 | 819.3 | 803.8 | 791.7 | 788.3 | 786.5 | 788.3 | 788.3 |
| 17.5° | 812.4  | 817.6  | 827.9  | 827.9 | 822.8 | 810.7 | 798.6 | 786.5 | 777.9 | 772.7 | 772.7 |
| 20°   | 833.1  | 833.1  | 836.6  | 836.6 | 834.8 | 815.9 | 786.5 | 757.2 | 740.0 | 729.6 | 727.9 |
| 22.5° | 860.7  | 853.8  | 846.9  | 846.9 | 853.8 | 803.8 | 746.9 | 702.0 | 674.4 | 671.0 | 664.1 |
| 25°   | 890.0  | 874.5  | 857.3  | 869.3 | 857.3 | 772.7 | 691.7 | 631.3 | 598.5 | 586.5 | 589.9 |
| 27.5° | 921.1  | 896.9  | 871.1  | 905.6 | 840.0 | 712.4 | 614.1 | 546.8 | 515.7 | 507.1 | 507.1 |
| 30°   | 964.2  | 928.0  | 890.0  | 943.5 | 807.2 | 643.4 | 522.6 | 474.3 | 457.1 | 450.2 | 448.5 |
| 32.5° | 1047.0 | 991.8  | 936.6  | 978.0 | 771.0 | 553.7 | 460.5 | 431.2 | 410.5 | 403.6 | 408.8 |
| 35°   | 1121.2 | 1043.5 | 1007.3 | 993.5 | 714.1 | 481.2 | 422.6 | 396.7 | 379.5 | 370.8 | 370.8 |
| 37.5° | 1188.4 | 1114.3 | 1086.7 | 993.5 | 639.9 | 436.4 | 398.4 | 377.7 | 355.3 | 348.4 | 348.4 |
| 40°   | 1335.0 | 1236.7 | 1188.4 | 979.7 | 548.5 | 414.0 | 386.4 | 362.2 | 343.2 | 336.3 | 334.6 |
| 42.5° | 1536.9 | 1404.0 | 1293.6 | 948.7 | 470.9 | 403.6 | 379.5 | 351.9 | 336.3 | 331.2 | 329.4 |
| 45°   | 1750.7 | 1633.4 | 1393.7 | 893.5 | 420.9 | 393.3 | 377.7 | 348.4 | 329.4 | 324.3 | 322.5 |
| 47.5° | 2009.5 | 1888.7 | 1509.3 | 809.0 | 386.4 | 386.4 | 376.0 | 343.2 | 326.0 | 320.8 | 320.8 |
| 50°   | 2295.8 | 2195.7 | 1655.9 | 712.4 | 360.5 | 381.2 | 372.6 | 343.2 | 324.3 | 319.1 | 317.4 |
| 52.5° | 2589.0 | 2542.4 | 1809.4 | 617.5 | 334.6 | 374.3 | 370.8 | 343.2 | 320.8 | 315.6 | 315.6 |
| 55°   | 2961.6 | 2923.6 | 1987.0 | 546.8 | 313.9 | 360.5 | 370.8 | 339.8 | 315.6 | 312.2 | 312.2 |
| 57.5° | 3327.3 | 3313.5 | 2125.0 | 484.7 | 298.4 | 343.2 | 365.7 | 334.6 | 310.5 | 308.8 | 308.8 |
| 60°   | 3639.5 | 3625.7 | 2183.7 | 407.1 | 282.9 | 326.0 | 355.3 | 326.0 | 301.9 | 303.6 | 303.6 |
| 62.5° | 3832.6 | 3753.3 | 2140.6 | 336.3 | 267.4 | 310.5 | 343.2 | 315.6 | 293.2 | 298.4 | 296.7 |
| 65°   | 3867.1 | 3682.6 | 1973.2 | 281.2 | 250.1 | 293.2 | 329.4 | 303.6 | 281.2 | 293.2 | 291.5 |
| 67.5° | 3613.6 | 3306.6 | 1659.3 | 244.9 | 232.9 | 274.3 | 313.9 | 286.3 | 267.4 | 284.6 | 279.4 |
| 70°   | 3065.1 | 2685.6 | 1228.1 | 217.3 | 215.6 | 251.8 | 293.2 | 265.6 | 248.4 | 257.0 | 250.1 |
| 72.5° | 2282.0 | 1938.7 | 795.2  | 196.6 | 196.6 | 226.0 | 263.9 | 239.8 | 222.5 | 224.2 | 217.3 |
| 75°   | 1423.0 | 1191.9 | 451.9  | 177.7 | 177.7 | 200.1 | 234.6 | 210.4 | 198.4 | 191.5 | 200.1 |
| 77.5° | 646.8  | 524.4  | 238.0  | 158.7 | 160.4 | 170.8 | 201.8 | 179.4 | 165.6 | 155.2 | 160.4 |
| 80°   | 239.8  | 213.9  | 155.2  | 136.3 | 139.7 | 141.4 | 162.1 | 143.2 | 131.1 | 124.2 | 120.7 |
| 82.5° | 124.2  | 115.6  | 105.2  | 108.7 | 113.8 | 108.7 | 125.9 | 106.9 | 93.1  | 88.0  | 74.2  |
| 85°   | 62.1   | 60.4   | 63.8   | 72.4  | 79.3  | 67.3  | 75.9  | 69.0  | 56.9  | 41.4  | 41.4  |
| 87.5° | 24.1   | 25.9   | 24.1   | 32.8  | 36.2  | 31.0  | 34.5  | 24.1  | 17.2  | 8.6   | 6.9   |
| 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)