

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: P573042

Luminaire Tested: **ARCH-S-PA2-30-722-U-T2U-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573042  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-30-722-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 320mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2650 lumens  
Efficiency: N/A  
Efficacy: 79.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1

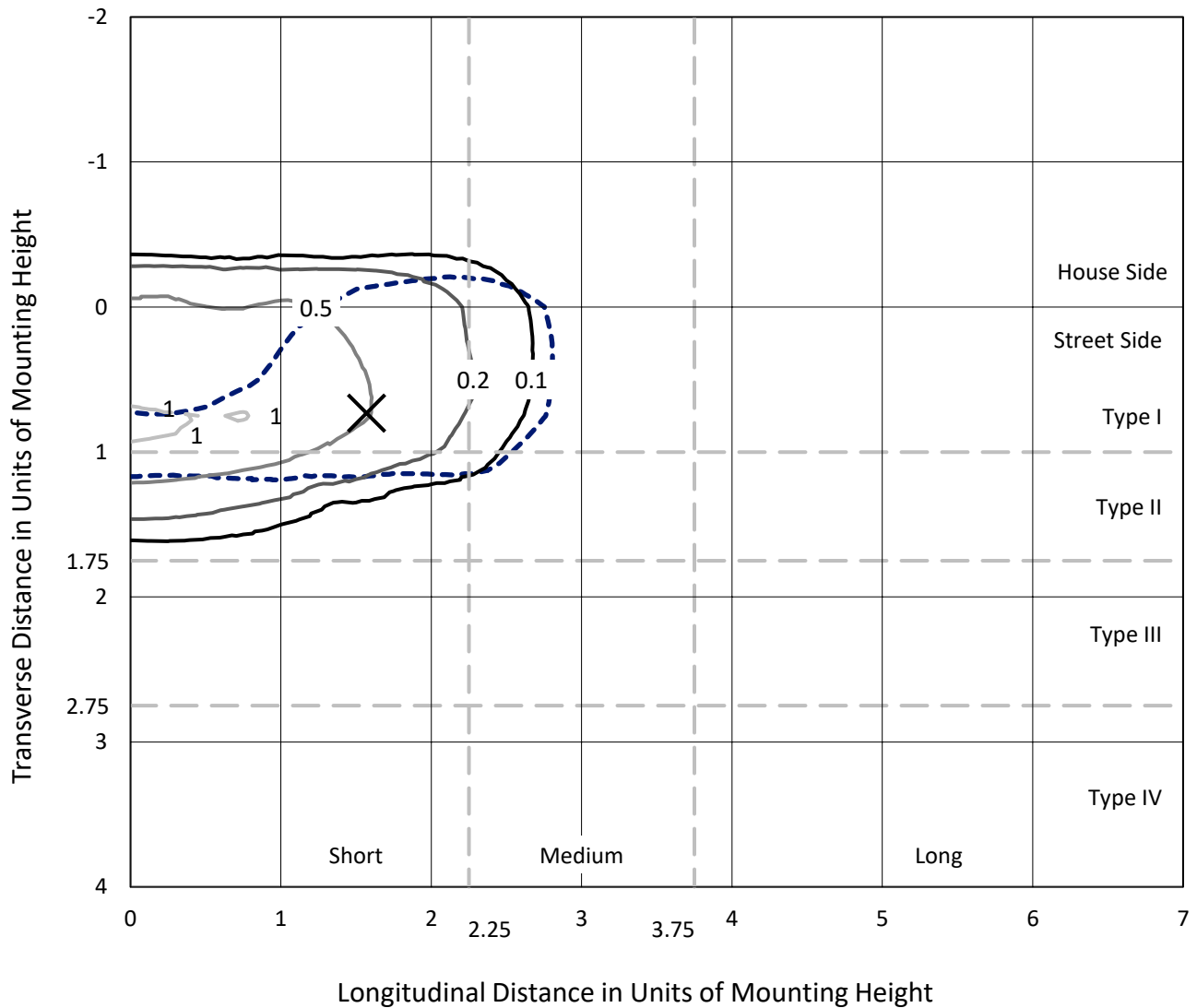
Input Watts (W): 33.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

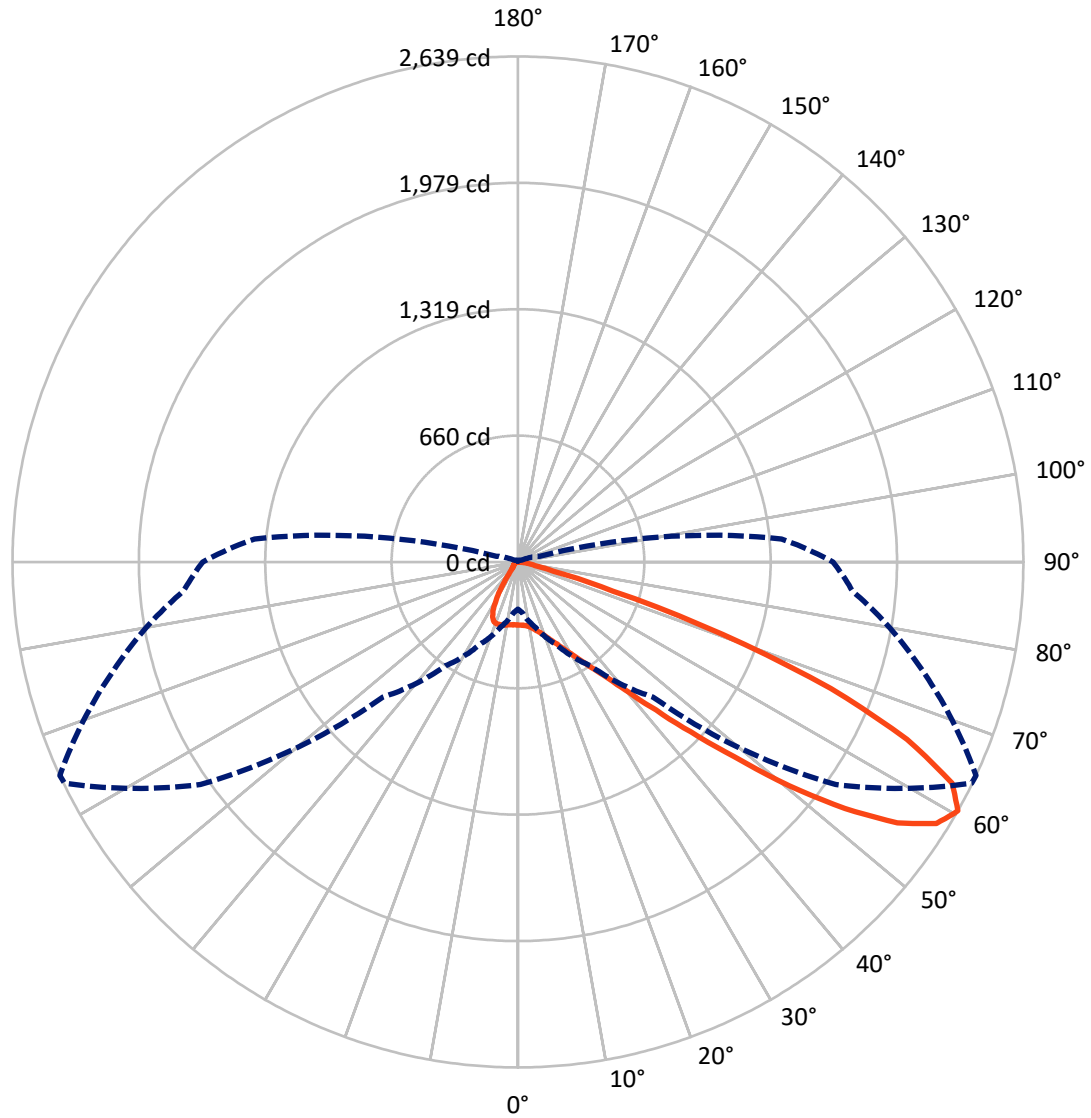
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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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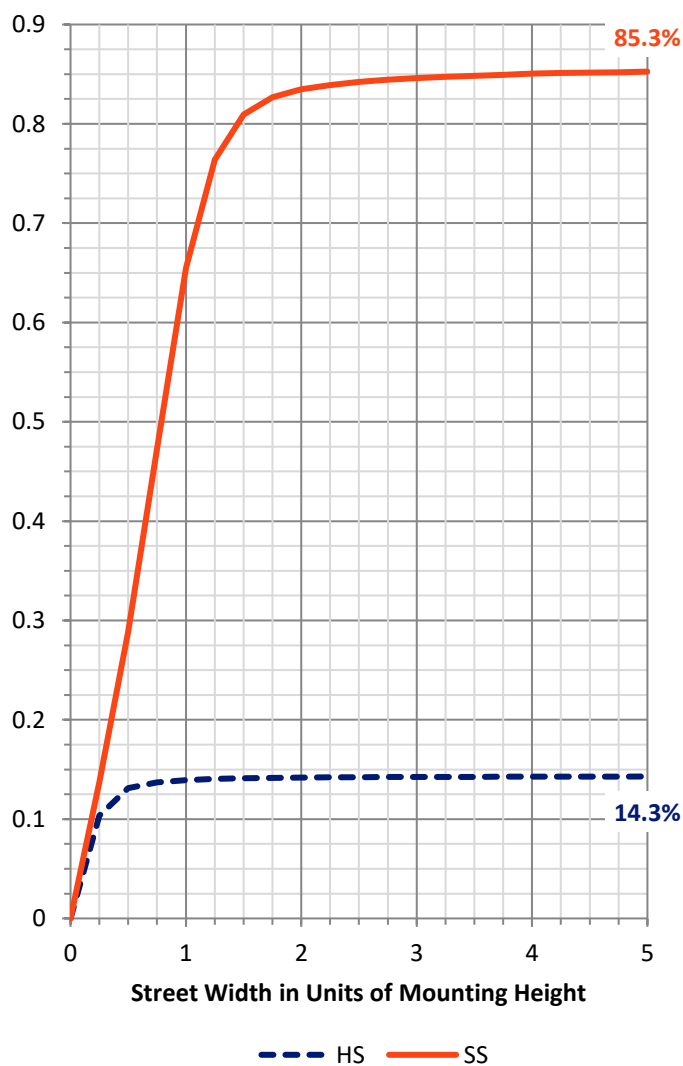
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 383.6    | 0.0    | 383.6  |
|                    | % Fixture | 14.5     | 0.0    | 14.5   |
| <b>Street Side</b> | Lumens    | 2266.3   | 0.0    | 2266.3 |
|                    | % Fixture | 85.5     | 0.0    | 85.5   |
| <b>Total</b>       | Lumens    | 2650.0   | 0.0    | 2650.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 31.2   | 1.2       |
| 10°-20°   | 88.5   | 3.3       |
| 20°-30°   | 150.4  | 5.7       |
| 30°-40°   | 310.3  | 11.7      |
| 40°-50°   | 624.0  | 23.5      |
| 50°-60°   | 763.6  | 28.8      |
| 60°-70°   | 540.2  | 20.4      |
| 70°-80°   | 130.2  | 4.9       |
| 80°-90°   | 11.8   | 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°    | 2650.0 | 100.0     |
| 0°-180°   | 2650.0 | 100.0     |

**Coefficient of Utilization**



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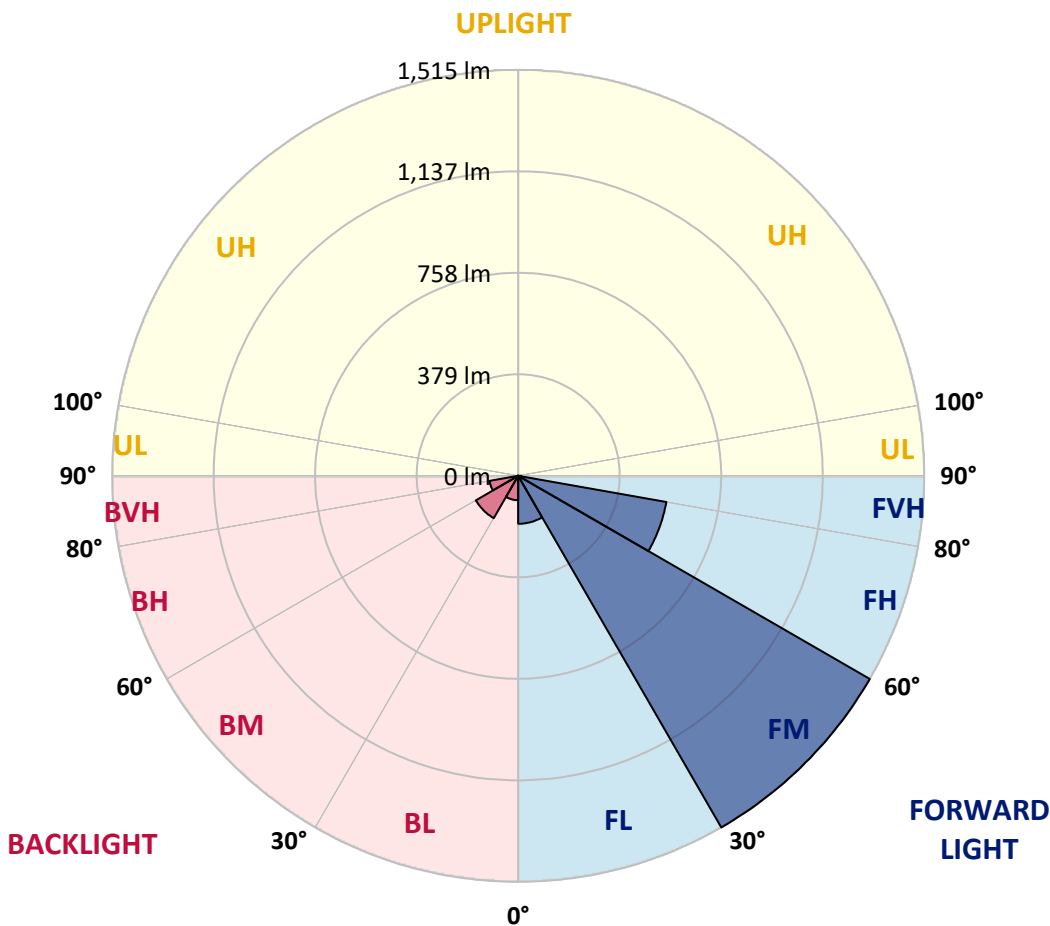
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|--------|-----------|-------------------------|------|--------|
|                |        |           | B                       | U    | G      |
| FL (0°-30°)    | 179.1  | 6.8       |                         |      |        |
| FM (30°-60°)   | 1515.4 | 57.2      |                         |      |        |
| FH (60°-80°)   | 561.6  | 21.2      |                         |      | G0/660 |
| FVH (80°-90°)  | 10.2   | 0.4       |                         |      | G1/100 |
| BL (0°-30°)    | 91.0   | 3.4       | B0/110                  |      |        |
| BM (30°-60°)   | 182.4  | 6.9       | B0/220                  |      |        |
| BH (60°-80°)   | 108.7  | 4.1       | B0/110                  |      | G0/110 |
| BVH (80°-90°)  | 1.5    | 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-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 64°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 330.1  | 330.1  | 330.1  | 330.1  | 330.1  | 330.1  | 330.1  | 330.1  | 330.1  | 330.1  | 330.1  |
| 2.5°  | 331.2  | 330.1  | 330.1  | 330.1  | 331.2  | 331.2  | 332.2  | 330.1  | 330.1  | 330.1  | 330.1  |
| 5°    | 329.1  | 328.0  | 328.0  | 329.1  | 330.1  | 330.1  | 332.2  | 332.2  | 332.2  | 333.3  | 333.3  |
| 7.5°  | 333.3  | 331.2  | 331.2  | 332.2  | 333.3  | 333.3  | 335.3  | 336.4  | 336.4  | 338.5  | 339.5  |
| 10°   | 338.5  | 337.4  | 337.4  | 339.5  | 341.6  | 341.6  | 344.7  | 344.7  | 344.7  | 346.8  | 347.9  |
| 12.5° | 345.8  | 344.7  | 344.7  | 347.9  | 351.0  | 353.1  | 355.2  | 356.2  | 357.3  | 357.3  | 357.3  |
| 15°   | 356.2  | 355.2  | 355.2  | 358.3  | 362.5  | 367.7  | 370.9  | 370.9  | 373.0  | 371.9  | 367.7  |
| 17.5° | 370.9  | 369.8  | 370.9  | 373.0  | 378.2  | 383.4  | 389.7  | 390.7  | 389.7  | 387.6  | 381.3  |
| 20°   | 394.9  | 391.8  | 393.9  | 399.1  | 399.1  | 402.2  | 410.6  | 413.7  | 414.7  | 408.5  | 397.0  |
| 22.5° | 420.0  | 420.0  | 422.1  | 428.3  | 424.1  | 428.3  | 435.6  | 440.9  | 443.0  | 437.7  | 418.9  |
| 25°   | 467.0  | 469.1  | 465.9  | 463.8  | 453.4  | 455.5  | 464.9  | 475.3  | 475.3  | 471.2  | 444.0  |
| 27.5° | 570.4  | 568.3  | 546.4  | 516.1  | 488.9  | 491.0  | 500.4  | 514.0  | 515.0  | 505.6  | 469.1  |
| 30°   | 718.8  | 720.8  | 678.0  | 609.1  | 549.5  | 533.8  | 544.3  | 560.0  | 562.0  | 546.4  | 501.5  |
| 32.5° | 950.7  | 932.9  | 853.5  | 761.6  | 649.8  | 593.4  | 597.6  | 614.3  | 620.5  | 607.0  | 552.6  |
| 35°   | 1250.5 | 1208.7 | 1089.6 | 975.7  | 813.8  | 699.9  | 667.6  | 685.3  | 688.5  | 681.1  | 616.4  |
| 37.5° | 1429.1 | 1395.7 | 1318.4 | 1215.0 | 1024.8 | 842.0  | 759.5  | 777.3  | 774.1  | 759.5  | 680.1  |
| 40°   | 1539.9 | 1521.1 | 1479.3 | 1431.2 | 1310.0 | 1065.6 | 911.0  | 896.3  | 897.4  | 876.5  | 783.5  |
| 42.5° | 1602.6 | 1585.8 | 1570.2 | 1582.7 | 1547.2 | 1470.9 | 1130.4 | 1063.5 | 1057.2 | 1017.5 | 903.7  |
| 45°   | 1605.7 | 1580.6 | 1599.4 | 1672.6 | 1729.0 | 1830.3 | 1416.6 | 1262.0 | 1265.1 | 1199.3 | 1053.1 |
| 47.5° | 1485.6 | 1465.7 | 1520.0 | 1663.2 | 1850.2 | 2065.4 | 1749.9 | 1533.6 | 1519.0 | 1389.4 | 1204.5 |
| 50°   | 1248.4 | 1247.4 | 1319.5 | 1522.1 | 1850.2 | 2186.5 | 2107.2 | 1852.2 | 1836.6 | 1587.9 | 1342.4 |
| 52.5° | 988.3  | 1008.1 | 1057.2 | 1249.5 | 1679.9 | 2175.1 | 2370.4 | 2181.3 | 2137.4 | 1764.5 | 1457.4 |
| 55°   | 768.9  | 761.6  | 821.1  | 953.8  | 1332.0 | 1976.6 | 2456.1 | 2440.4 | 2403.8 | 1921.2 | 1558.7 |
| 57.5° | 472.2  | 499.4  | 579.8  | 697.9  | 969.5  | 1554.5 | 2332.8 | 2598.2 | 2576.2 | 2067.5 | 1664.2 |
| 60°   | 245.5  | 266.4  | 353.1  | 476.4  | 662.3  | 996.6  | 2024.6 | 2634.7 | 2638.9 | 2185.5 | 1754.0 |
| 62.5° | 154.6  | 153.6  | 193.3  | 334.3  | 426.2  | 560.0  | 1572.3 | 2505.2 | 2544.9 | 2276.4 | 1839.7 |
| 65°   | 116.0  | 117.0  | 132.7  | 221.5  | 289.4  | 292.5  | 932.9  | 2166.7 | 2232.5 | 2300.4 | 1869.0 |
| 67.5° | 107.6  | 108.6  | 116.0  | 145.2  | 217.3  | 195.4  | 410.6  | 1670.5 | 1762.4 | 2078.9 | 1756.1 |
| 70°   | 96.1   | 97.2   | 108.6  | 120.1  | 164.0  | 143.1  | 184.9  | 1006.0 | 1133.5 | 1508.5 | 1405.1 |
| 72.5° | 75.2   | 77.3   | 90.9   | 113.9  | 122.2  | 108.6  | 128.5  | 445.0  | 519.2  | 829.5  | 804.4  |
| 75°   | 55.4   | 56.4   | 68.9   | 87.8   | 107.6  | 77.3   | 99.2   | 176.6  | 193.3  | 311.3  | 265.4  |
| 77.5° | 38.7   | 38.7   | 48.1   | 65.8   | 89.8   | 54.3   | 71.0   | 95.1   | 97.2   | 116.0  | 76.3   |
| 80°   | 24.0   | 25.1   | 30.3   | 44.9   | 55.4   | 52.2   | 43.9   | 63.7   | 63.7   | 60.6   | 31.3   |
| 82.5° | 13.6   | 14.6   | 20.9   | 30.3   | 37.6   | 35.5   | 28.2   | 36.6   | 37.6   | 38.7   | 17.8   |
| 85°   | 6.3    | 7.3    | 12.5   | 18.8   | 21.9   | 16.7   | 16.7   | 18.8   | 18.8   | 25.1   | 10.4   |
| 87.5° | 1.0    | 1.0    | 6.3    | 8.4    | 7.3    | 8.4    | 8.4    | 10.4   | 10.4   | 12.5   | 5.2    |
| 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°    | 330.1  | 330.1  | 330.1 | 330.1 | 330.1 | 330.1 | 330.1 | 330.1 | 330.1 | 330.1 | 330.1 |
| 2.5°  | 329.1  | 329.1  | 329.1 | 328.0 | 328.0 | 327.0 | 324.9 | 324.9 | 324.9 | 324.9 | 325.9 |
| 5°    | 333.3  | 332.2  | 331.2 | 328.0 | 325.9 | 321.8 | 317.6 | 316.5 | 313.4 | 313.4 | 314.5 |
| 7.5°  | 338.5  | 338.5  | 335.3 | 330.1 | 324.9 | 317.6 | 310.3 | 305.1 | 299.8 | 298.8 | 297.7 |
| 10°   | 347.9  | 345.8  | 342.7 | 333.3 | 324.9 | 313.4 | 301.9 | 288.3 | 277.9 | 272.7 | 270.6 |
| 12.5° | 355.2  | 354.2  | 347.9 | 337.4 | 323.9 | 306.1 | 280.0 | 248.6 | 223.6 | 210.0 | 210.0 |
| 15°   | 365.6  | 363.6  | 354.2 | 339.5 | 320.7 | 278.9 | 225.7 | 177.6 | 150.4 | 135.8 | 133.7 |
| 17.5° | 376.1  | 371.9  | 360.4 | 340.6 | 307.1 | 229.8 | 157.7 | 113.9 | 95.1  | 87.8  | 85.7  |
| 20°   | 388.6  | 381.3  | 364.6 | 341.6 | 273.7 | 167.2 | 102.4 | 76.3  | 68.9  | 65.8  | 66.9  |
| 22.5° | 405.3  | 392.8  | 368.8 | 335.3 | 223.6 | 108.6 | 72.1  | 61.6  | 57.5  | 54.3  | 54.3  |
| 25°   | 426.2  | 408.5  | 376.1 | 317.6 | 161.9 | 73.1  | 57.5  | 51.2  | 47.0  | 44.9  | 43.9  |
| 27.5° | 445.0  | 423.1  | 383.4 | 286.2 | 103.4 | 57.5  | 48.1  | 42.8  | 38.7  | 37.6  | 36.6  |
| 30°   | 470.1  | 439.8  | 390.7 | 236.1 | 67.9  | 47.0  | 40.7  | 35.5  | 32.4  | 31.3  | 31.3  |
| 32.5° | 512.9  | 472.2  | 404.3 | 179.7 | 51.2  | 40.7  | 34.5  | 30.3  | 28.2  | 27.2  | 27.2  |
| 35°   | 563.1  | 511.9  | 415.8 | 125.4 | 43.9  | 34.5  | 29.3  | 26.1  | 25.1  | 24.0  | 24.0  |
| 37.5° | 615.3  | 558.9  | 417.9 | 79.4  | 38.7  | 30.3  | 26.1  | 24.0  | 21.9  | 21.9  | 21.9  |
| 40°   | 709.3  | 641.4  | 408.5 | 53.3  | 33.4  | 27.2  | 23.0  | 21.9  | 19.8  | 19.8  | 19.8  |
| 42.5° | 819.0  | 741.7  | 384.4 | 42.8  | 30.3  | 24.0  | 21.9  | 19.8  | 17.8  | 17.8  | 16.7  |
| 45°   | 961.1  | 855.6  | 343.7 | 37.6  | 27.2  | 21.9  | 19.8  | 17.8  | 16.7  | 15.7  | 15.7  |
| 47.5° | 1094.8 | 985.1  | 305.1 | 33.4  | 25.1  | 20.9  | 17.8  | 15.7  | 14.6  | 14.6  | 14.6  |
| 50°   | 1222.3 | 1084.4 | 260.1 | 31.3  | 23.0  | 19.8  | 16.7  | 14.6  | 13.6  | 12.5  | 12.5  |
| 52.5° | 1314.2 | 1162.7 | 218.3 | 28.2  | 20.9  | 17.8  | 15.7  | 13.6  | 11.5  | 10.4  | 10.4  |
| 55°   | 1416.6 | 1242.1 | 180.7 | 25.1  | 19.8  | 16.7  | 13.6  | 11.5  | 9.4   | 8.4   | 8.4   |
| 57.5° | 1531.5 | 1319.5 | 146.3 | 23.0  | 18.8  | 14.6  | 11.5  | 9.4   | 7.3   | 6.3   | 6.3   |
| 60°   | 1645.4 | 1381.1 | 117.0 | 20.9  | 16.7  | 13.6  | 10.4  | 7.3   | 5.2   | 4.2   | 4.2   |
| 62.5° | 1759.3 | 1422.9 | 89.8  | 18.8  | 15.7  | 11.5  | 8.4   | 5.2   | 3.1   | 2.1   | 2.1   |
| 65°   | 1806.3 | 1411.4 | 66.9  | 16.7  | 13.6  | 9.4   | 7.3   | 5.2   | 3.1   | 2.1   | 2.1   |
| 67.5° | 1675.7 | 1269.3 | 47.0  | 16.7  | 12.5  | 9.4   | 6.3   | 4.2   | 2.1   | 1.0   | 1.0   |
| 70°   | 1308.0 | 979.9  | 34.5  | 16.7  | 12.5  | 9.4   | 6.3   | 4.2   | 2.1   | 1.0   | 1.0   |
| 72.5° | 741.7  | 545.3  | 26.1  | 14.6  | 11.5  | 8.4   | 6.3   | 4.2   | 2.1   | 1.0   | 1.0   |
| 75°   | 264.3  | 175.5  | 19.8  | 13.6  | 10.4  | 7.3   | 6.3   | 4.2   | 2.1   | 1.0   | 1.0   |
| 77.5° | 63.7   | 44.9   | 15.7  | 11.5  | 9.4   | 7.3   | 5.2   | 4.2   | 3.1   | 1.0   | 1.0   |
| 80°   | 26.1   | 18.8   | 12.5  | 9.4   | 7.3   | 6.3   | 5.2   | 4.2   | 2.1   | 1.0   | 1.0   |
| 82.5° | 11.5   | 9.4    | 5.2   | 5.2   | 4.2   | 4.2   | 4.2   | 4.2   | 2.1   | 1.0   | 1.0   |
| 85°   | 5.2    | 4.2    | 2.1   | 2.1   | 1.0   | 1.0   | 1.0   | 2.1   | 2.1   | 1.0   | 1.0   |
| 87.5° | 3.1    | 2.1    | 2.1   | 2.1   | 1.0   | 1.0   | 1.0   | 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)