

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: P399467

Luminaire Tested: **ARCH-L-PA3-140-830-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399467  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-140-830-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17860 lumens  
Efficiency: N/A  
Efficacy: 124.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G3

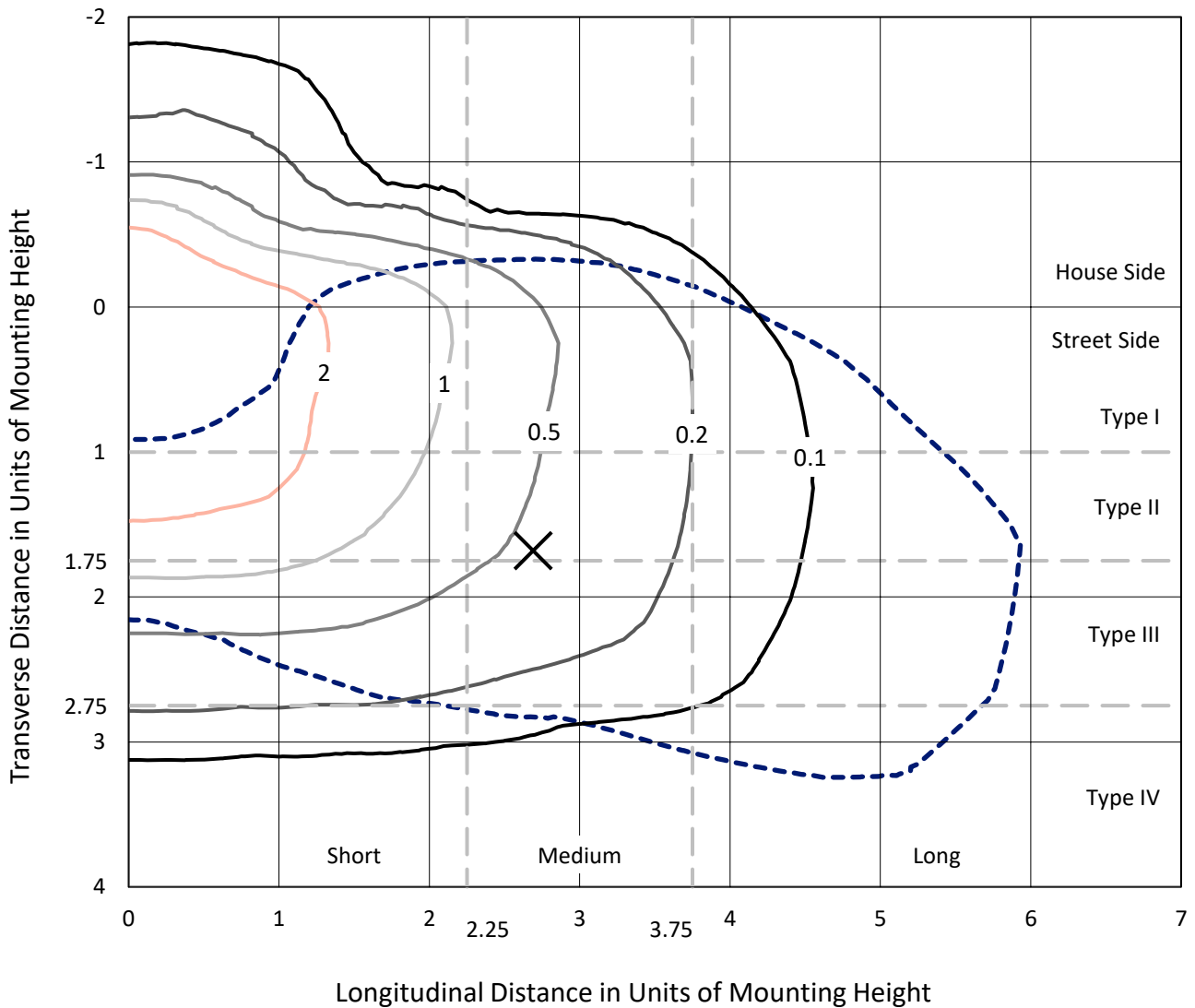
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

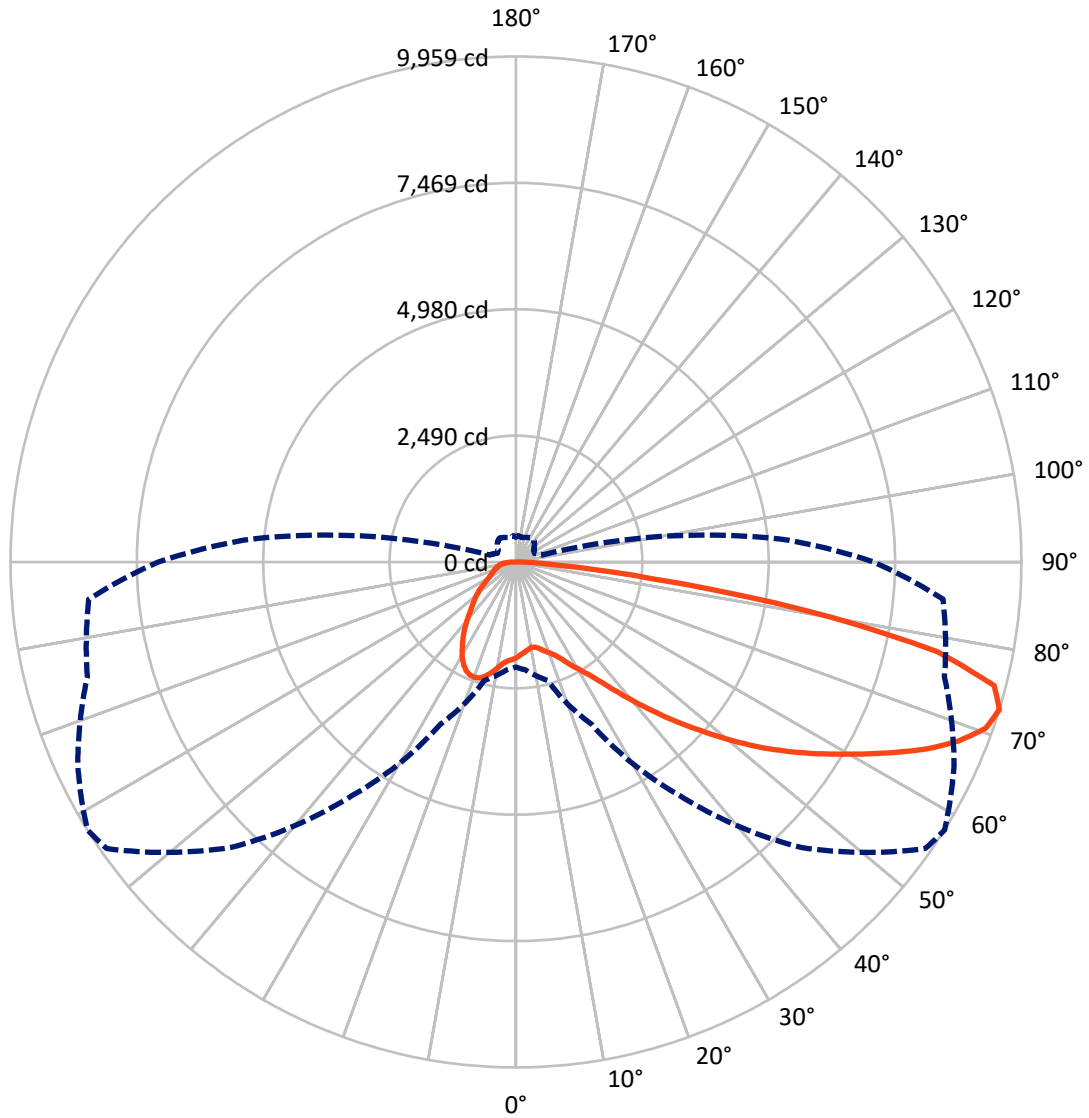
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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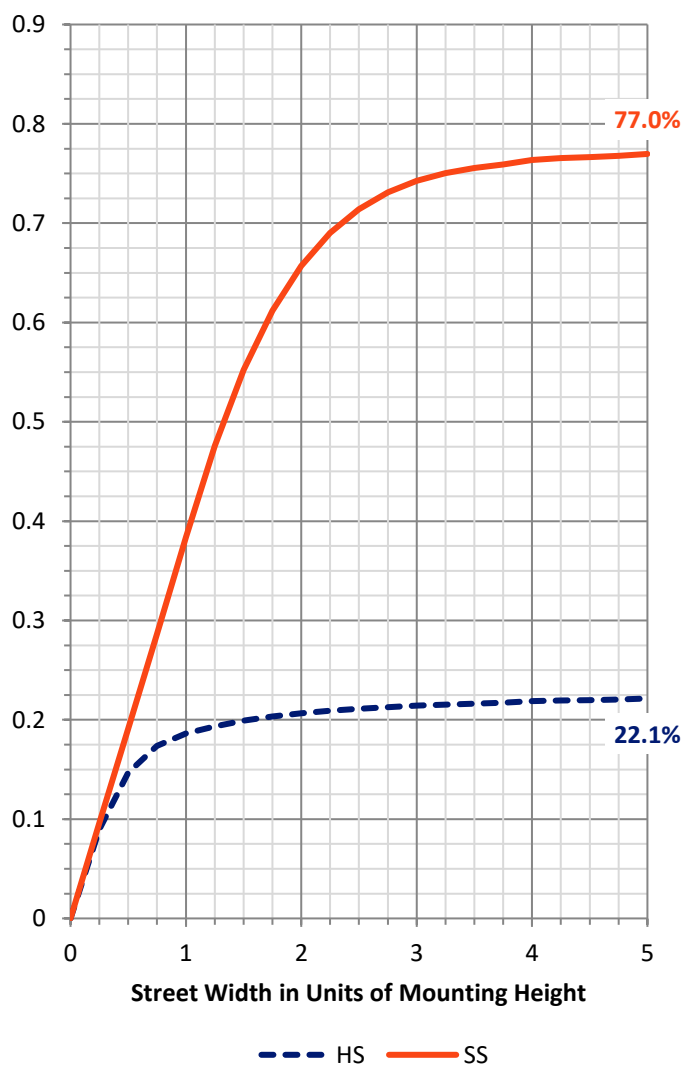
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4050.4   | 0.0    | 4050.4  |
|                    | % Fixture | 22.7     | 0.0    | 22.7    |
| <b>Street Side</b> | Lumens    | 13809.6  | 0.0    | 13809.6 |
|                    | % Fixture | 77.3     | 0.0    | 77.3    |
| <b>Total</b>       | Lumens    | 17860.0  | 0.0    | 17860.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 181.5   | 1.0       |
| 10°-20°   | 576.3   | 3.2       |
| 20°-30°   | 1032.4  | 5.8       |
| 30°-40°   | 1553.0  | 8.7       |
| 40°-50°   | 2514.8  | 14.1      |
| 50°-60°   | 3785.6  | 21.2      |
| 60°-70°   | 4455.3  | 24.9      |
| 70°-80°   | 3159.2  | 17.7      |
| 80°-90°   | 602.0   | 3.4       |
| 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°    | 17860.0 | 100.0     |
| 0°-180°   | 17860.0 | 100.0     |

**Coefficient of Utilization**

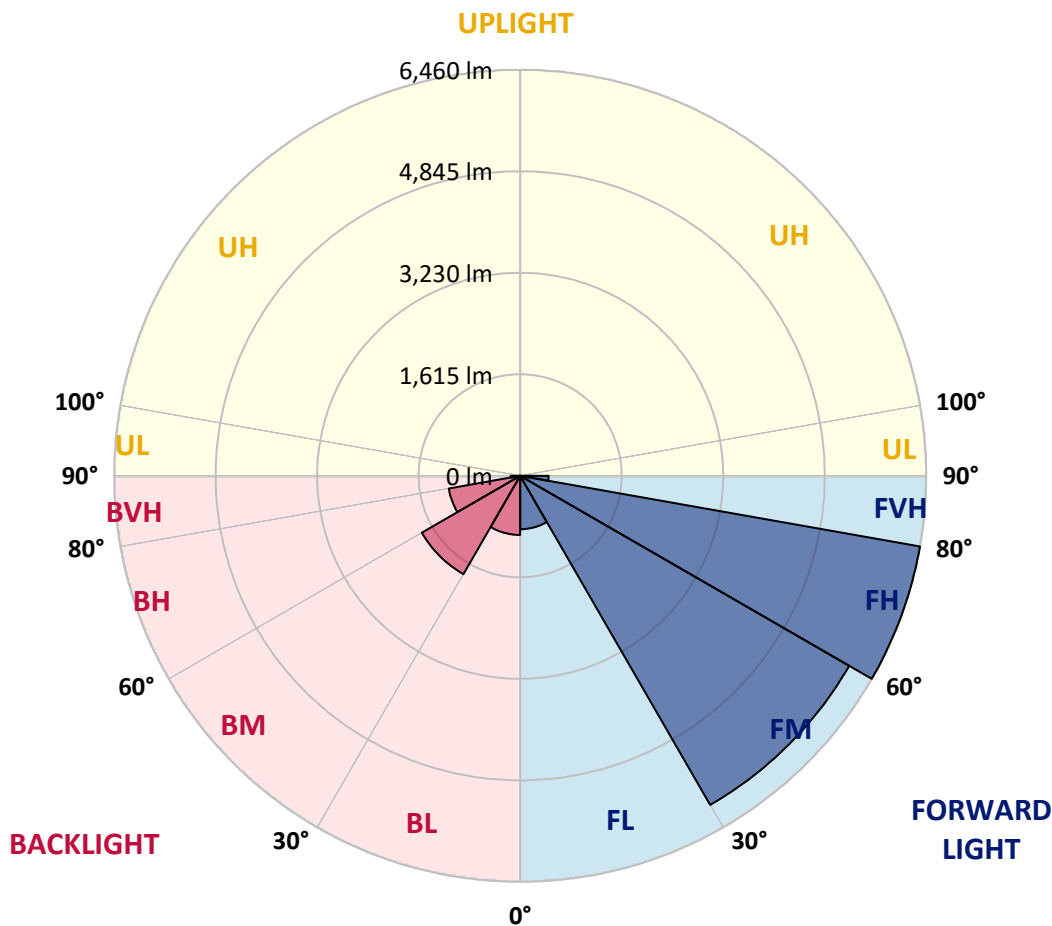


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 849.3  | 4.8       |                         |      |         |
| FM (30°-60°)   | 6046.1 | 33.9      |                         |      |         |
| FH (60°-80°)   | 6460.0 | 36.2      |                         |      | G3/7500 |
| FVH (80°-90°)  | 454.1  | 2.5       |                         |      | G3/500  |
| BL (0°-30°)    | 940.8  | 5.3       | B2/1000                 |      |         |
| BM (30°-60°)   | 1807.3 | 10.1      | B2/2500                 |      |         |
| BH (60°-80°)   | 1154.4 | 6.5       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 147.9  | 0.8       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 58°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 |
| 2.5°  | 1813.1 | 1803.7 | 1806.0 | 1806.0 | 1815.5 | 1820.2 | 1822.5 | 1829.6 | 1834.3 | 1846.1 | 1862.6 |
| 5°    | 1728.2 | 1721.2 | 1723.5 | 1725.9 | 1742.4 | 1758.9 | 1773.0 | 1782.5 | 1796.6 | 1815.5 | 1839.1 |
| 7.5°  | 1666.9 | 1662.2 | 1664.6 | 1669.3 | 1683.4 | 1702.3 | 1725.9 | 1740.0 | 1761.2 | 1796.6 | 1836.7 |
| 10°   | 1622.1 | 1622.1 | 1624.5 | 1633.9 | 1648.1 | 1671.7 | 1690.5 | 1707.0 | 1749.5 | 1813.1 | 1874.4 |
| 12.5° | 1586.8 | 1586.8 | 1593.8 | 1612.7 | 1636.3 | 1659.9 | 1704.7 | 1723.5 | 1780.1 | 1867.3 | 1940.4 |
| 15°   | 1584.4 | 1586.8 | 1589.1 | 1605.6 | 1631.6 | 1683.4 | 1749.5 | 1777.8 | 1846.1 | 1949.9 | 2034.7 |
| 17.5° | 1622.1 | 1624.5 | 1615.1 | 1619.8 | 1650.4 | 1723.5 | 1810.8 | 1843.8 | 1931.0 | 2044.2 | 2131.4 |
| 20°   | 1737.7 | 1737.7 | 1709.4 | 1683.4 | 1704.7 | 1784.8 | 1883.9 | 1916.9 | 2013.5 | 2138.5 | 2225.7 |
| 22.5° | 1973.4 | 1985.2 | 1919.2 | 1862.6 | 1829.6 | 1874.4 | 1964.0 | 1999.4 | 2107.8 | 2242.2 | 2329.5 |
| 25°   | 2258.7 | 2270.5 | 2180.9 | 2100.8 | 2039.5 | 2032.4 | 2091.3 | 2129.1 | 2218.7 | 2357.8 | 2430.9 |
| 27.5° | 2534.6 | 2513.4 | 2430.9 | 2355.4 | 2277.6 | 2213.9 | 2258.7 | 2291.7 | 2395.5 | 2501.6 | 2546.4 |
| 30°   | 2751.5 | 2735.0 | 2654.8 | 2600.6 | 2527.5 | 2445.0 | 2419.1 | 2454.4 | 2539.3 | 2638.3 | 2661.9 |
| 32.5° | 2992.0 | 2980.2 | 2900.0 | 2829.3 | 2768.0 | 2690.2 | 2633.6 | 2650.1 | 2697.3 | 2768.0 | 2782.2 |
| 35°   | 3298.5 | 3324.4 | 3239.6 | 3095.7 | 3027.4 | 2951.9 | 2911.8 | 2916.5 | 2951.9 | 2996.7 | 2973.1 |
| 37.5° | 3621.5 | 3652.2 | 3656.9 | 3430.5 | 3338.6 | 3270.2 | 3227.8 | 3244.3 | 3286.7 | 3317.4 | 3244.3 |
| 40°   | 4220.4 | 4189.7 | 4067.1 | 3899.7 | 3758.3 | 3692.3 | 3633.3 | 3631.0 | 3661.6 | 3715.8 | 3583.8 |
| 42.5° | 5015.0 | 4986.7 | 4739.1 | 4522.2 | 4298.2 | 4222.7 | 4107.2 | 4057.7 | 4071.9 | 4140.2 | 3956.3 |
| 45°   | 5776.5 | 5764.7 | 5566.7 | 5314.4 | 5045.6 | 4899.4 | 4635.4 | 4515.1 | 4503.3 | 4557.6 | 4338.3 |
| 47.5° | 6453.2 | 6401.3 | 6257.5 | 6061.8 | 6033.5 | 5651.6 | 5165.9 | 5003.2 | 4946.6 | 4977.2 | 4732.0 |
| 50°   | 7177.0 | 7000.2 | 6802.1 | 6681.9 | 6887.0 | 6531.0 | 5701.1 | 5531.3 | 5392.2 | 5413.4 | 5158.8 |
| 52.5° | 7561.3 | 7264.3 | 7134.6 | 7169.9 | 7445.8 | 7309.1 | 6283.4 | 6075.9 | 5852.0 | 5882.6 | 5583.2 |
| 55°   | 7231.3 | 7228.9 | 7285.5 | 7504.8 | 7889.1 | 7731.1 | 6837.5 | 6604.1 | 6358.9 | 6366.0 | 6071.2 |
| 57.5° | 6778.6 | 6870.5 | 7162.9 | 7646.2 | 8438.4 | 8174.4 | 7382.1 | 7134.6 | 6910.6 | 6875.2 | 6625.3 |
| 60°   | 6366.0 | 6467.3 | 6891.7 | 7622.6 | 8629.4 | 8579.9 | 7900.9 | 7683.9 | 7502.4 | 7398.7 | 7207.7 |
| 62.5° | 5738.8 | 5814.2 | 6415.5 | 7471.7 | 8469.1 | 8872.3 | 8426.6 | 8278.1 | 8141.3 | 7926.8 | 7834.8 |
| 65°   | 5000.8 | 5026.7 | 5661.0 | 6974.3 | 8268.7 | 8985.4 | 8950.1 | 8884.0 | 8752.0 | 8436.1 | 8454.9 |
| 67.5° | 4201.5 | 4253.4 | 4809.8 | 6179.7 | 7830.1 | 8933.6 | 9355.6 | 9409.8 | 9254.2 | 8780.3 | 8851.0 |
| 70°   | 3350.4 | 3414.0 | 3836.1 | 5081.0 | 7085.1 | 8709.6 | 9730.5 | 9817.7 | 9518.3 | 8893.5 | 8924.1 |
| 72.5° | 2072.5 | 2133.8 | 2416.7 | 3529.6 | 5616.2 | 7957.4 | 9846.0 | 9959.2 | 9525.4 | 8742.6 | 8447.9 |
| 75°   | 716.8  | 723.8  | 945.5  | 1692.9 | 3333.9 | 6007.6 | 9468.8 | 9735.2 | 9225.9 | 8193.2 | 7351.5 |
| 77.5° | 327.7  | 339.5  | 419.7  | 697.9  | 1478.3 | 3241.9 | 7818.3 | 8485.6 | 8315.8 | 7335.0 | 5658.6 |
| 80°   | 226.3  | 231.1  | 290.0  | 417.3  | 853.5  | 1141.2 | 4934.8 | 5804.8 | 6101.9 | 5679.8 | 3626.2 |
| 82.5° | 169.8  | 174.5  | 224.0  | 282.9  | 615.4  | 554.1  | 1879.1 | 2697.3 | 3352.7 | 3291.4 | 1516.0 |
| 85°   | 162.7  | 160.3  | 174.5  | 188.6  | 410.3  | 330.1  | 608.3  | 834.6  | 1308.6 | 1119.9 | 382.0  |
| 87.5° | 70.7   | 77.8   | 179.2  | 106.1  | 214.6  | 153.3  | 264.1  | 308.9  | 398.5  | 346.6  | 136.8  |
| 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°    | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 | 1883.9 |
| 2.5°  | 1869.7 | 1874.4 | 1888.6 | 1909.8 | 1921.6 | 1945.2 | 1961.7 | 1971.1 | 1978.2 | 1980.5 | 1980.5 |
| 5°    | 1853.2 | 1862.6 | 1893.3 | 1928.6 | 1961.7 | 2011.2 | 2056.0 | 2081.9 | 2100.8 | 2107.8 | 2110.2 |
| 7.5°  | 1857.9 | 1881.5 | 1926.3 | 1978.2 | 2020.6 | 2084.3 | 2138.5 | 2190.4 | 2232.8 | 2249.3 | 2249.3 |
| 10°   | 1902.7 | 1935.7 | 1997.0 | 2065.4 | 2119.6 | 2185.6 | 2242.2 | 2287.0 | 2336.5 | 2364.8 | 2369.5 |
| 12.5° | 1971.1 | 2011.2 | 2091.3 | 2166.8 | 2228.1 | 2280.0 | 2331.8 | 2364.8 | 2388.4 | 2409.6 | 2414.3 |
| 15°   | 2067.8 | 2117.3 | 2197.4 | 2275.2 | 2329.5 | 2362.5 | 2376.6 | 2376.6 | 2374.3 | 2376.6 | 2381.3 |
| 17.5° | 2164.4 | 2211.6 | 2291.7 | 2369.5 | 2395.5 | 2376.6 | 2360.1 | 2355.4 | 2353.0 | 2348.3 | 2350.7 |
| 20°   | 2258.7 | 2303.5 | 2371.9 | 2430.9 | 2409.6 | 2343.6 | 2322.4 | 2320.0 | 2313.0 | 2308.2 | 2303.5 |
| 22.5° | 2353.0 | 2386.1 | 2442.6 | 2463.9 | 2379.0 | 2284.7 | 2258.7 | 2244.6 | 2235.2 | 2223.4 | 2211.6 |
| 25°   | 2461.5 | 2470.9 | 2513.4 | 2480.4 | 2303.5 | 2176.2 | 2138.5 | 2117.3 | 2107.8 | 2096.0 | 2086.6 |
| 27.5° | 2562.9 | 2562.9 | 2570.0 | 2454.4 | 2192.7 | 2032.4 | 1975.8 | 1938.1 | 1935.7 | 1933.4 | 1931.0 |
| 30°   | 2654.8 | 2643.0 | 2619.5 | 2376.6 | 2048.9 | 1855.6 | 1770.7 | 1733.0 | 1747.1 | 1758.9 | 1761.2 |
| 32.5° | 2763.3 | 2739.7 | 2673.7 | 2270.5 | 1876.8 | 1657.5 | 1553.8 | 1537.3 | 1553.8 | 1567.9 | 1558.5 |
| 35°   | 2933.1 | 2890.6 | 2730.3 | 2147.9 | 1711.7 | 1476.0 | 1376.9 | 1353.4 | 1348.6 | 1346.3 | 1327.4 |
| 37.5° | 3175.9 | 3102.8 | 2775.1 | 2015.9 | 1549.0 | 1315.6 | 1242.5 | 1193.0 | 1148.2 | 1101.1 | 1094.0 |
| 40°   | 3473.0 | 3348.0 | 2805.7 | 1865.0 | 1376.9 | 1181.2 | 1103.4 | 1039.8 | 964.3  | 881.8  | 872.4  |
| 42.5° | 3798.4 | 3612.1 | 2819.9 | 1697.6 | 1226.0 | 1070.4 | 973.8  | 893.6  | 808.7  | 745.1  | 733.3  |
| 45°   | 4149.7 | 3897.4 | 2808.1 | 1537.3 | 1103.4 | 976.1  | 867.7  | 780.4  | 712.0  | 667.2  | 657.8  |
| 47.5° | 4491.5 | 4225.1 | 2775.1 | 1409.9 | 1009.1 | 895.9  | 785.1  | 705.0  | 653.1  | 603.6  | 591.8  |
| 50°   | 4930.1 | 4538.7 | 2735.0 | 1310.9 | 905.4  | 815.8  | 733.3  | 648.4  | 589.4  | 565.9  | 561.1  |
| 52.5° | 5415.8 | 4852.3 | 2687.8 | 1186.0 | 804.0  | 752.1  | 700.3  | 624.8  | 605.9  | 561.1  | 554.1  |
| 55°   | 5941.6 | 5224.8 | 2678.4 | 1028.0 | 714.4  | 707.3  | 667.2  | 646.0  | 650.7  | 561.1  | 549.4  |
| 57.5° | 6495.6 | 5623.3 | 2699.6 | 870.0  | 641.3  | 667.2  | 681.4  | 664.9  | 657.8  | 572.9  | 549.4  |
| 60°   | 7073.3 | 6007.6 | 2636.0 | 723.8  | 584.7  | 634.2  | 697.9  | 655.5  | 603.6  | 568.2  | 551.7  |
| 62.5° | 7634.4 | 6330.6 | 2360.1 | 620.1  | 542.3  | 624.8  | 688.5  | 620.1  | 561.1  | 561.1  | 554.1  |
| 65°   | 8042.3 | 6474.4 | 1846.1 | 544.6  | 514.0  | 613.0  | 672.0  | 596.5  | 549.4  | 565.9  | 556.4  |
| 67.5° | 8089.5 | 6325.9 | 1240.2 | 485.7  | 490.4  | 591.8  | 634.2  | 575.3  | 537.6  | 580.0  | 565.9  |
| 70°   | 7799.5 | 5939.2 | 759.2  | 440.9  | 459.8  | 554.1  | 601.2  | 554.1  | 521.1  | 568.2  | 547.0  |
| 72.5° | 7047.3 | 5217.7 | 535.2  | 403.2  | 426.8  | 518.7  | 570.6  | 535.2  | 497.5  | 514.0  | 492.8  |
| 75°   | 5781.2 | 4043.6 | 424.4  | 367.8  | 393.7  | 485.7  | 544.6  | 506.9  | 469.2  | 462.1  | 448.0  |
| 77.5° | 4095.4 | 2591.2 | 341.9  | 339.5  | 358.4  | 445.6  | 509.3  | 473.9  | 436.2  | 422.0  | 412.6  |
| 80°   | 2355.4 | 1270.8 | 294.7  | 306.5  | 325.4  | 405.5  | 466.8  | 436.2  | 400.8  | 379.6  | 365.5  |
| 82.5° | 900.7  | 443.3  | 259.4  | 266.4  | 287.6  | 363.1  | 424.4  | 398.5  | 363.1  | 382.0  | 320.7  |
| 85°   | 292.4  | 242.8  | 212.2  | 219.3  | 240.5  | 301.8  | 374.9  | 353.7  | 313.6  | 278.2  | 257.0  |
| 87.5° | 129.7  | 132.0  | 113.2  | 125.0  | 150.9  | 200.4  | 273.5  | 259.4  | 228.7  | 191.0  | 183.9  |
| 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)