

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: P399517

Luminaire Tested: **ARCH-L-PA3-150-760-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399517  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-150-760-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5700K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23977 lumens  
Efficiency: N/A  
Efficacy: 156.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

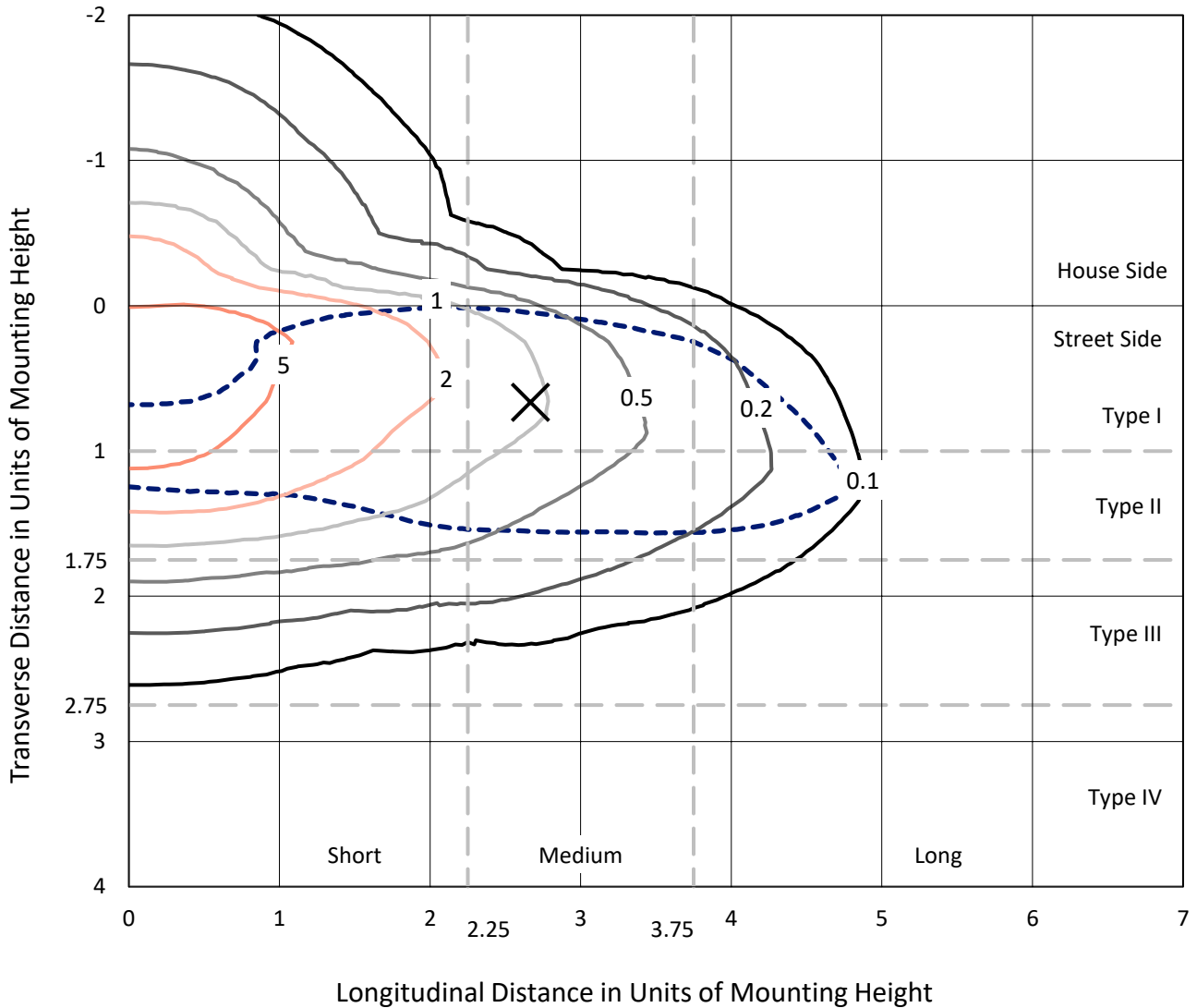
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

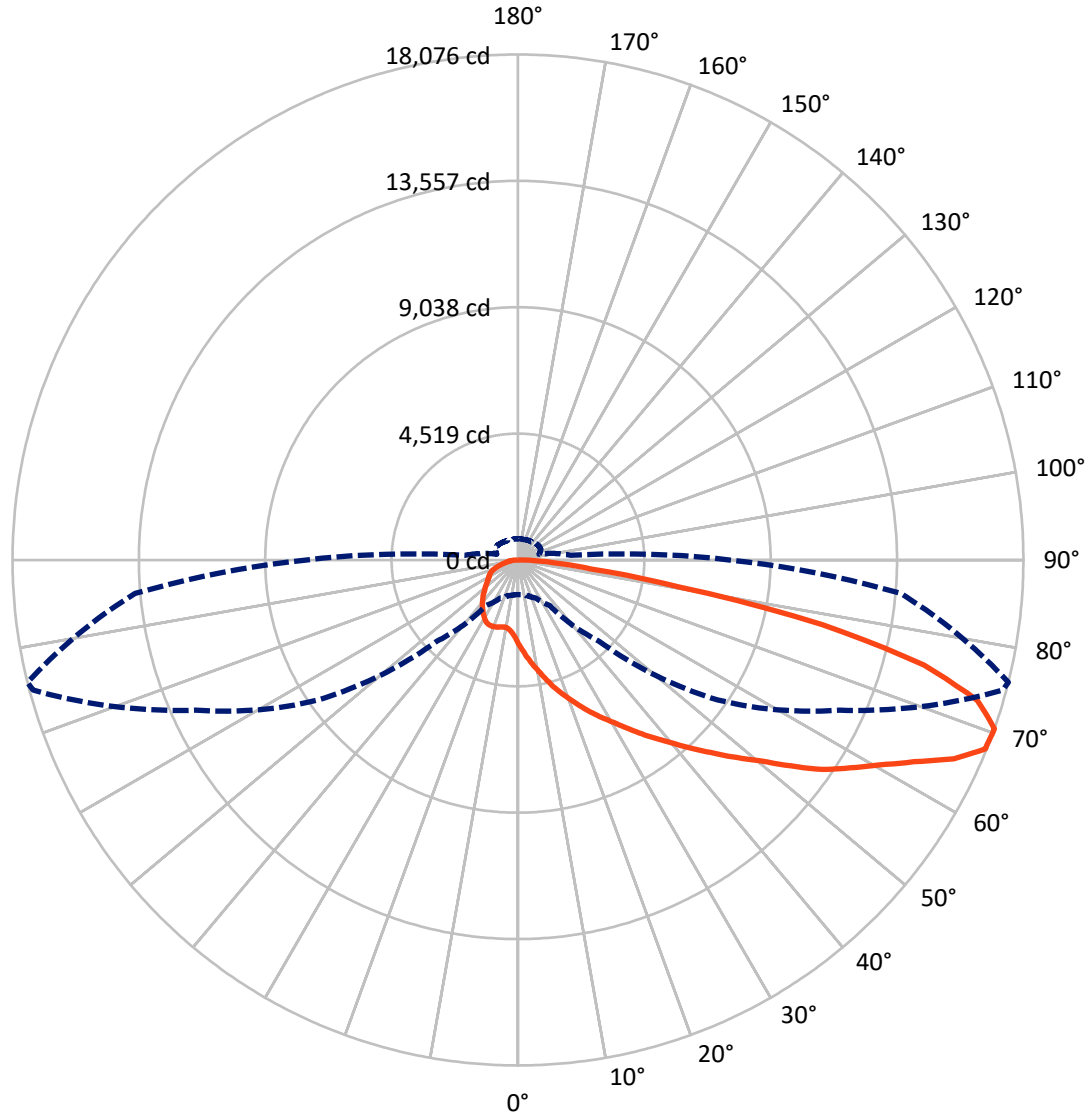
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc  
 Type II - Medium - N/A

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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    | 3914.5   | 0.0    | 3914.5  |
|                    | % Fixture | 16.3     | 0.0    | 16.3    |
| <b>Street Side</b> | Lumens    | 20062.5  | 0.0    | 20062.5 |
|                    | % Fixture | 83.7     | 0.0    | 83.7    |
| <b>Total</b>       | Lumens    | 23977.0  | 0.0    | 23977.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 311.6   | 1.3       |
| 10°-20°   | 1058.9  | 4.4       |
| 20°-30°   | 1894.4  | 7.9       |
| 30°-40°   | 3064.5  | 12.8      |
| 40°-50°   | 4433.3  | 18.5      |
| 50°-60°   | 5074.2  | 21.2      |
| 60°-70°   | 4667.7  | 19.5      |
| 70°-80°   | 2886.4  | 12.0      |
| 80°-90°   | 586.1   | 2.4       |
| 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°    | 23977.0 | 100.0     |
| 0°-180°   | 23977.0 | 100.0     |

**Coefficient of Utilization**



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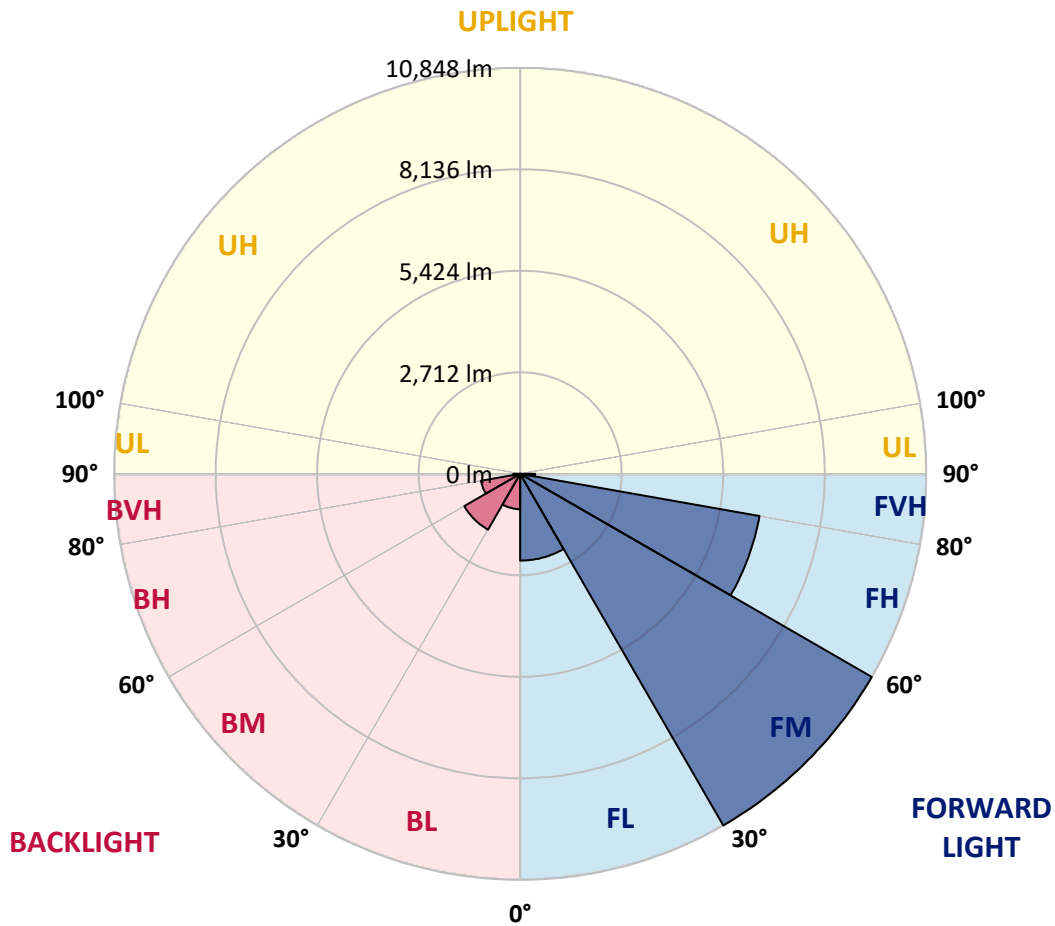
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2319.4  | 9.7       |                         |      |         |
| FM (30°-60°)   | 10848.5 | 45.2      |                         |      |         |
| FH (60°-80°)   | 6492.3  | 27.1      |                         |      | G3/7500 |
| FVH (80°-90°)  | 402.4   | 1.7       |                         |      | G3/500  |
| BL (0°-30°)    | 945.5   | 3.9       | B2/1000                 |      |         |
| BM (30°-60°)   | 1723.5  | 7.2       | B2/2500                 |      |         |
| BH (60°-80°)   | 1061.7  | 4.4       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 183.8   | 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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2998.4  | 2998.4  | 2998.4  | 2998.4  | 2998.4  | 2998.4  | 2998.4  | 2998.4  | 2998.4  | 2998.4  | 2998.4  |
| 2.5°  | 3821.3  | 3793.0  | 3789.8  | 3745.7  | 3704.7  | 3594.3  | 3515.5  | 3376.8  | 3238.0  | 3234.9  | 3096.2  |
| 5°    | 4417.2  | 4388.9  | 4373.1  | 4319.5  | 4250.1  | 4105.1  | 3963.2  | 3748.8  | 3512.4  | 3496.6  | 3234.9  |
| 7.5°  | 4820.8  | 4795.6  | 4764.1  | 4742.0  | 4675.8  | 4546.5  | 4373.1  | 4117.7  | 3793.0  | 3761.4  | 3395.7  |
| 10°   | 5092.0  | 5076.2  | 5069.9  | 5054.1  | 5013.1  | 4909.1  | 4742.0  | 4470.8  | 4073.6  | 4038.9  | 3566.0  |
| 12.5° | 5208.6  | 5202.3  | 5230.7  | 5274.8  | 5290.6  | 5249.6  | 5088.8  | 4833.4  | 4382.6  | 4344.7  | 3770.9  |
| 15°   | 5073.0  | 5079.4  | 5151.9  | 5303.2  | 5464.0  | 5552.3  | 5457.7  | 5208.6  | 4732.5  | 4678.9  | 4010.5  |
| 17.5° | 5010.0  | 5019.4  | 5069.9  | 5214.9  | 5441.9  | 5716.2  | 5760.4  | 5564.9  | 5069.9  | 4994.2  | 4262.7  |
| 20°   | 5120.3  | 5133.0  | 5170.8  | 5284.3  | 5441.9  | 5735.2  | 5965.3  | 5905.4  | 5401.0  | 5322.1  | 4505.5  |
| 22.5° | 5401.0  | 5416.7  | 5413.6  | 5486.1  | 5593.3  | 5795.1  | 6078.8  | 6227.0  | 5747.8  | 5659.5  | 4757.8  |
| 25°   | 6000.0  | 5987.4  | 5880.2  | 5845.5  | 5873.9  | 6003.2  | 6230.2  | 6536.0  | 6110.4  | 6022.1  | 5022.6  |
| 27.5° | 6813.5  | 6797.7  | 6602.2  | 6425.6  | 6268.0  | 6324.8  | 6444.6  | 6785.1  | 6479.2  | 6378.4  | 5274.8  |
| 30°   | 7683.7  | 7664.7  | 7437.7  | 7150.8  | 6800.8  | 6718.9  | 6703.1  | 7002.6  | 6851.3  | 6744.1  | 5542.8  |
| 32.5° | 8531.8  | 8516.0  | 8273.3  | 7939.1  | 7456.7  | 7210.7  | 7059.4  | 7245.4  | 7273.8  | 7169.7  | 5836.1  |
| 35°   | 9304.3  | 9304.3  | 9096.2  | 8698.9  | 8153.4  | 7781.4  | 7532.3  | 7544.9  | 7759.3  | 7639.5  | 6170.3  |
| 37.5° | 9991.6  | 9988.4  | 9761.4  | 9370.5  | 8847.1  | 8421.4  | 8112.5  | 7907.5  | 8222.8  | 8118.8  | 6520.2  |
| 40°   | 10537.1 | 10515.0 | 10347.9 | 10007.4 | 9480.8  | 9058.3  | 8746.2  | 8333.2  | 8739.9  | 8645.3  | 6892.3  |
| 42.5° | 10934.3 | 10921.7 | 10808.2 | 10511.8 | 10010.5 | 9613.3  | 9398.9  | 8869.2  | 9326.3  | 9231.7  | 7327.4  |
| 45°   | 11088.8 | 11114.0 | 11114.0 | 10833.4 | 10436.2 | 10073.6 | 9979.0  | 9458.8  | 9960.1  | 9865.5  | 7794.0  |
| 47.5° | 10839.7 | 10905.9 | 11041.5 | 11060.4 | 10710.5 | 10464.5 | 10496.1 | 10051.5 | 10612.7 | 10562.3 | 8304.8  |
| 50°   | 10061.0 | 10183.9 | 10480.3 | 11016.3 | 10820.8 | 10764.1 | 10937.5 | 10656.9 | 11312.7 | 11296.9 | 8925.9  |
| 52.5° | 8052.6  | 8352.1  | 9275.9  | 10237.5 | 10745.1 | 10902.8 | 11375.7 | 11337.9 | 12214.4 | 12239.6 | 9736.2  |
| 55°   | 6176.6  | 6290.1  | 7358.9  | 8995.3  | 10281.7 | 10858.7 | 11669.0 | 12003.2 | 13191.8 | 13223.3 | 10480.3 |
| 57.5° | 4994.2  | 5069.9  | 5653.2  | 7358.9  | 9225.4  | 10619.0 | 11899.1 | 12391.0 | 13942.2 | 14024.2 | 11142.4 |
| 60°   | 3956.9  | 4067.3  | 4458.2  | 5631.1  | 7746.7  | 10042.0 | 12059.9 | 12822.9 | 14749.4 | 14872.3 | 11933.8 |
| 62.5° | 2941.7  | 2995.3  | 3364.2  | 4171.3  | 6132.4  | 9004.7  | 11974.8 | 13292.7 | 15739.4 | 15887.6 | 12886.0 |
| 65°   | 2093.5  | 2140.8  | 2402.5  | 2966.9  | 4533.9  | 7601.7  | 11479.8 | 13642.7 | 16981.6 | 17133.0 | 13844.5 |
| 67.5° | 1567.0  | 1585.9  | 1734.1  | 2074.6  | 3055.2  | 5905.4  | 10477.2 | 13582.8 | 17889.7 | 18025.2 | 14229.1 |
| 70°   | 1239.1  | 1245.4  | 1317.9  | 1500.8  | 1986.3  | 4111.4  | 8721.0  | 12703.1 | 17955.9 | 18075.7 | 13743.6 |
| 72.5° | 1027.9  | 1024.7  | 1065.7  | 1154.0  | 1384.1  | 2601.2  | 6460.3  | 11069.9 | 17104.6 | 17186.6 | 12387.8 |
| 75°   | 848.1   | 854.4   | 882.8   | 933.3   | 1056.2  | 1715.2  | 4187.1  | 8831.3  | 15089.9 | 15001.6 | 10395.2 |
| 77.5° | 712.6   | 709.4   | 722.0   | 766.2   | 854.4   | 1232.8  | 2453.0  | 6381.5  | 11183.4 | 11139.3 | 6822.9  |
| 80°   | 573.8   | 580.1   | 599.1   | 636.9   | 718.9   | 939.6   | 1450.3  | 3982.1  | 6000.0  | 5839.2  | 3260.1  |
| 82.5° | 384.7   | 444.6   | 482.4   | 526.5   | 621.1   | 693.6   | 920.7   | 2024.2  | 2683.1  | 2642.1  | 1478.7  |
| 85°   | 182.9   | 242.8   | 359.4   | 409.9   | 504.5   | 435.1   | 624.3   | 964.8   | 1343.1  | 1327.4  | 532.8   |
| 87.5° | 37.8    | 37.8    | 192.3   | 230.2   | 312.1   | 186.0   | 346.8   | 419.3   | 649.5   | 608.5   | 217.6   |
| 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°    | 2998.4 | 2998.4 | 2998.4 | 2998.4 | 2998.4 | 2998.4 | 2998.4 | 2998.4 | 2998.4 | 2998.4 | 2998.4 |
| 2.5°  | 3014.2 | 2929.1 | 2758.8 | 2623.2 | 2484.5 | 2405.7 | 2307.9 | 2260.6 | 2251.2 | 2226.0 | 2244.9 |
| 5°    | 3067.8 | 2900.7 | 2579.1 | 2367.8 | 2226.0 | 2156.6 | 2121.9 | 2109.3 | 2106.2 | 2099.8 | 2099.8 |
| 7.5°  | 3140.3 | 2884.9 | 2465.6 | 2251.2 | 2159.7 | 2137.7 | 2147.1 | 2166.1 | 2169.2 | 2175.5 | 2172.4 |
| 10°   | 3228.6 | 2888.1 | 2402.5 | 2222.8 | 2178.7 | 2181.8 | 2213.3 | 2238.6 | 2251.2 | 2260.6 | 2257.5 |
| 12.5° | 3351.6 | 2925.9 | 2393.1 | 2241.7 | 2222.8 | 2235.4 | 2266.9 | 2292.2 | 2304.8 | 2307.9 | 2307.9 |
| 15°   | 3512.4 | 3004.7 | 2415.1 | 2282.7 | 2266.9 | 2276.4 | 2295.3 | 2304.8 | 2307.9 | 2304.8 | 2304.8 |
| 17.5° | 3688.9 | 3099.3 | 2446.7 | 2307.9 | 2282.7 | 2273.3 | 2266.9 | 2257.5 | 2238.6 | 2226.0 | 2226.0 |
| 20°   | 3859.2 | 3184.4 | 2462.4 | 2304.8 | 2260.6 | 2222.8 | 2185.0 | 2137.7 | 2106.2 | 2080.9 | 2080.9 |
| 22.5° | 4029.4 | 3263.3 | 2462.4 | 2270.1 | 2200.7 | 2128.2 | 2049.4 | 1973.7 | 1926.4 | 1894.9 | 1894.9 |
| 25°   | 4209.1 | 3338.9 | 2443.5 | 2210.2 | 2106.2 | 2002.1 | 1894.9 | 1800.3 | 1753.0 | 1721.5 | 1715.2 |
| 27.5° | 4360.5 | 3383.1 | 2393.1 | 2125.1 | 1989.5 | 1857.1 | 1734.1 | 1636.4 | 1601.7 | 1573.3 | 1573.3 |
| 30°   | 4521.3 | 3411.5 | 2298.5 | 2014.7 | 1857.1 | 1705.7 | 1579.6 | 1500.8 | 1463.0 | 1422.0 | 1418.8 |
| 32.5° | 4701.0 | 3430.4 | 2191.3 | 1898.1 | 1721.5 | 1560.7 | 1453.5 | 1390.4 | 1308.5 | 1264.3 | 1258.0 |
| 35°   | 4909.1 | 3455.6 | 2077.8 | 1765.6 | 1585.9 | 1440.9 | 1377.8 | 1273.8 | 1195.0 | 1157.1 | 1154.0 |
| 37.5° | 5129.8 | 3474.5 | 1954.8 | 1649.0 | 1463.0 | 1362.1 | 1299.0 | 1176.0 | 1106.7 | 1049.9 | 1043.6 |
| 40°   | 5363.1 | 3474.5 | 1828.7 | 1535.5 | 1365.2 | 1327.4 | 1207.6 | 1097.2 | 980.6  | 952.2  | 945.9  |
| 42.5° | 5621.7 | 3468.2 | 1702.6 | 1425.1 | 1273.8 | 1248.6 | 1154.0 | 1037.3 | 977.4  | 952.2  | 945.9  |
| 45°   | 5896.0 | 3446.1 | 1582.8 | 1299.0 | 1179.2 | 1128.7 | 1056.2 | 1024.7 | 999.5  | 999.5  | 999.5  |
| 47.5° | 6208.1 | 3427.2 | 1447.2 | 1185.5 | 1109.8 | 1053.1 | 999.5  | 980.6  | 977.4  | 986.9  | 996.3  |
| 50°   | 6608.5 | 3420.9 | 1333.7 | 1103.5 | 1056.2 | 990.0  | 983.7  | 967.9  | 971.1  | 971.1  | 971.1  |
| 52.5° | 7094.1 | 3364.2 | 1226.5 | 1043.6 | 1002.6 | 923.8  | 942.7  | 958.5  | 964.8  | 961.6  | 958.5  |
| 55°   | 7450.3 | 3263.3 | 1135.1 | 1002.6 | 964.8  | 898.6  | 923.8  | 949.0  | 955.3  | 945.9  | 945.9  |
| 57.5° | 7771.9 | 3121.4 | 1062.5 | 971.1  | 939.6  | 882.8  | 911.2  | 936.4  | 930.1  | 927.0  | 923.8  |
| 60°   | 8140.8 | 2985.8 | 1005.8 | 955.3  | 914.3  | 876.5  | 901.7  | 917.5  | 908.0  | 901.7  | 898.6  |
| 62.5° | 8541.3 | 2853.4 | 964.8  | 955.3  | 895.4  | 873.4  | 892.3  | 898.6  | 879.7  | 873.4  | 873.4  |
| 65°   | 8727.3 | 2645.3 | 920.7  | 955.3  | 886.0  | 867.1  | 873.4  | 867.1  | 848.1  | 848.1  | 845.0  |
| 67.5° | 8421.4 | 2301.6 | 863.9  | 942.7  | 898.6  | 857.6  | 845.0  | 835.5  | 813.5  | 813.5  | 807.1  |
| 70°   | 7576.5 | 1891.8 | 781.9  | 901.7  | 901.7  | 854.4  | 807.1  | 785.1  | 759.9  | 769.3  | 756.7  |
| 72.5° | 6472.9 | 1500.8 | 681.0  | 832.4  | 882.8  | 851.3  | 766.2  | 731.5  | 709.4  | 718.9  | 699.9  |
| 75°   | 5243.3 | 1163.4 | 561.2  | 722.0  | 835.5  | 835.5  | 725.2  | 677.9  | 652.7  | 652.7  | 630.6  |
| 77.5° | 3342.1 | 860.7  | 457.2  | 599.1  | 750.4  | 813.5  | 690.5  | 618.0  | 580.1  | 570.7  | 554.9  |
| 80°   | 1655.3 | 605.4  | 375.2  | 476.1  | 640.0  | 763.0  | 665.3  | 548.6  | 495.0  | 476.1  | 447.7  |
| 82.5° | 879.7  | 419.3  | 299.5  | 372.0  | 510.8  | 687.3  | 633.7  | 472.9  | 406.7  | 378.4  | 346.8  |
| 85°   | 394.1  | 258.5  | 239.6  | 283.8  | 387.8  | 564.4  | 570.7  | 387.8  | 312.1  | 372.0  | 274.3  |
| 87.5° | 145.0  | 116.7  | 116.7  | 145.0  | 223.9  | 236.5  | 403.6  | 249.1  | 198.6  | 135.6  | 107.2  |
| 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)