

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: P400192

Luminaire Tested: **ARCH-L-PA3-250-722-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400192  
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-PA3-250-722-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24840 lumens  
Efficiency: N/A  
Efficacy: 99.0 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

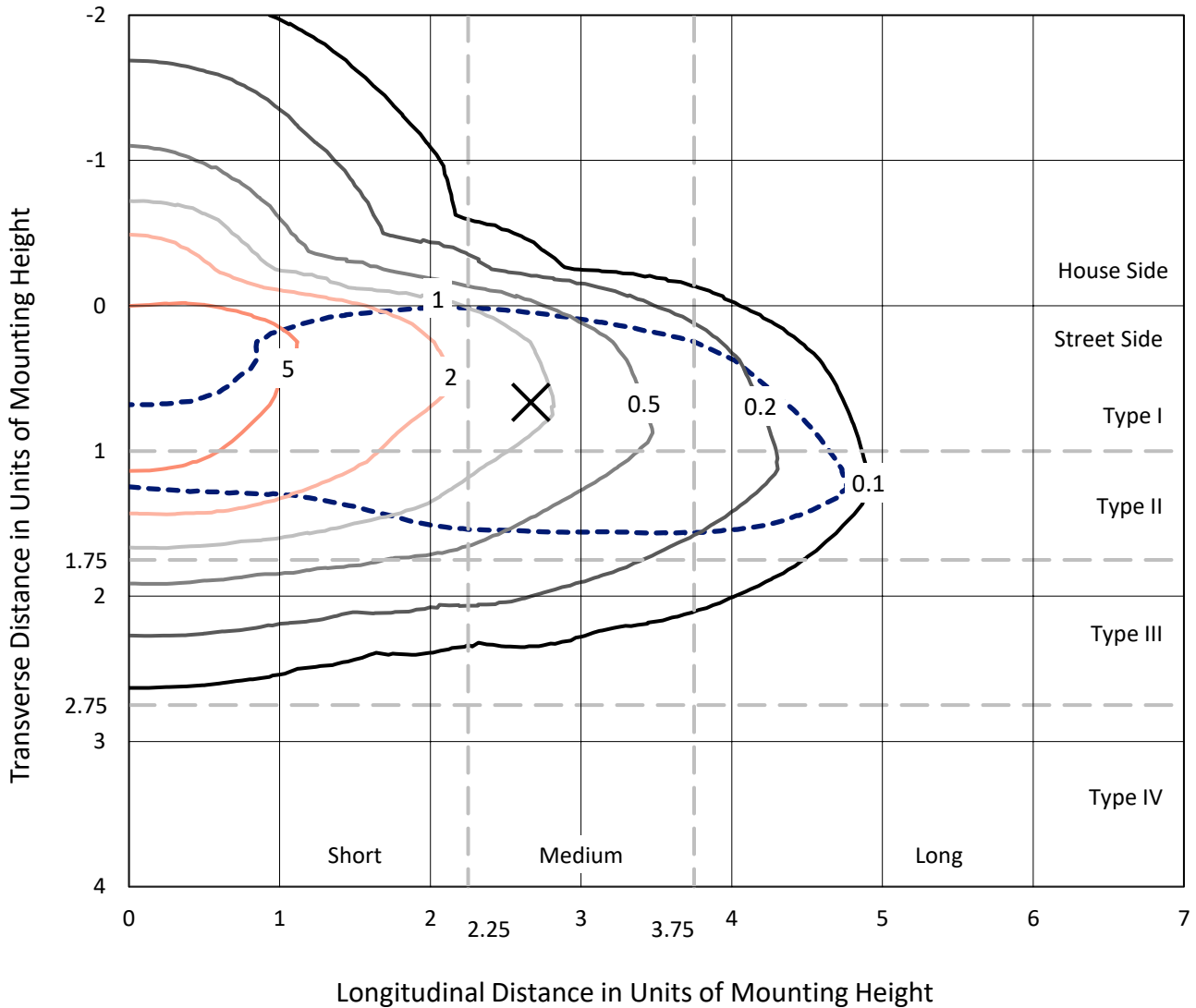
Input Watts (W): 251  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

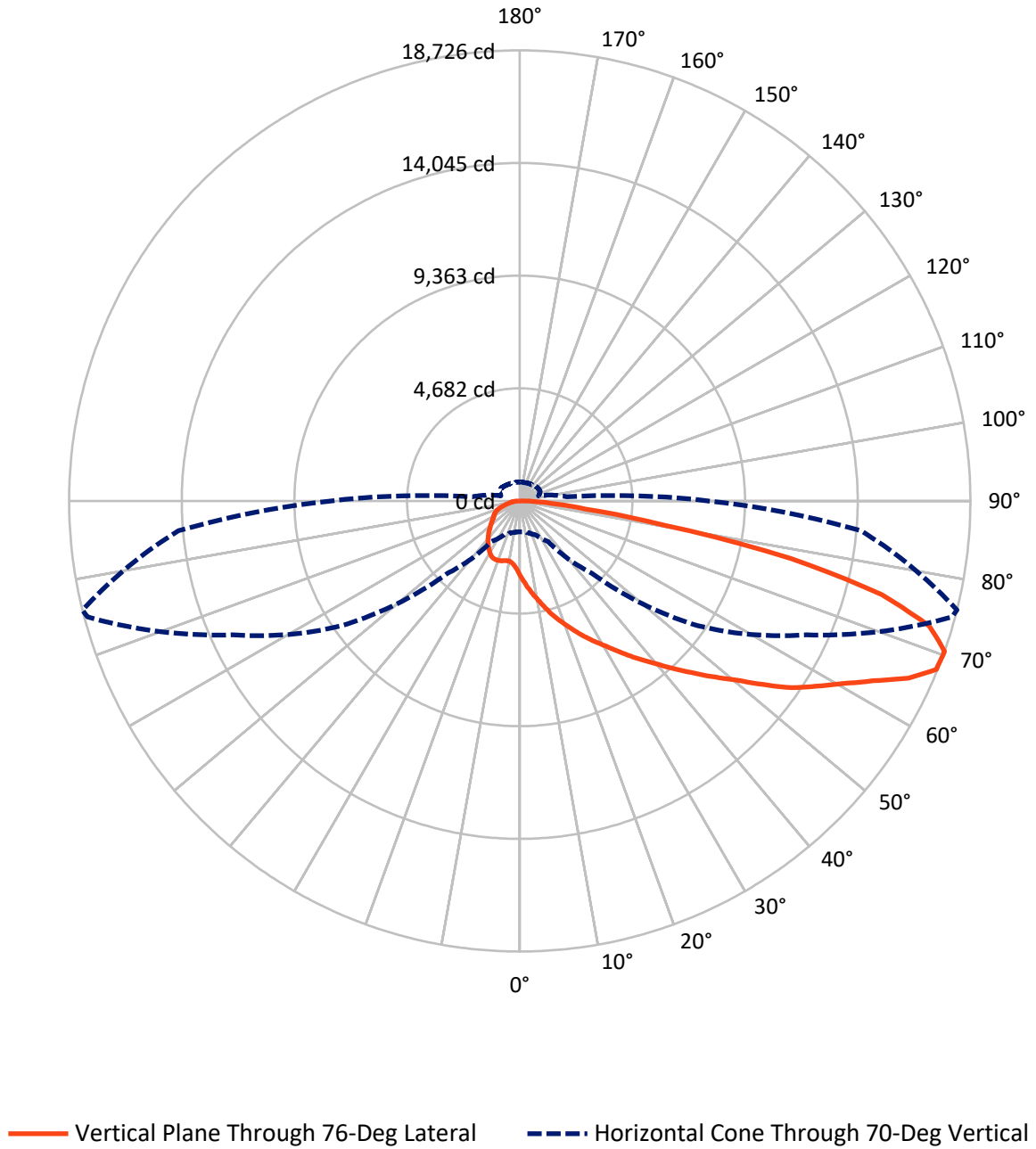
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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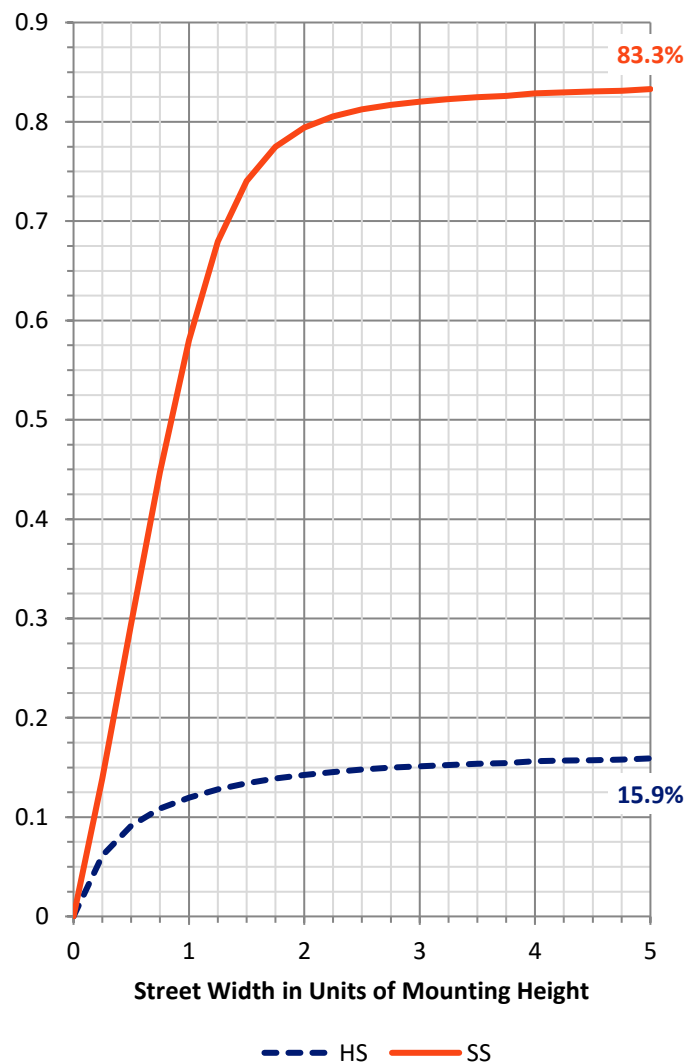
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4055.4   | 0.0    | 4055.4  |
|                    | % Fixture | 16.3     | 0.0    | 16.3    |
| <b>Street Side</b> | Lumens    | 20784.6  | 0.0    | 20784.6 |
|                    | % Fixture | 83.7     | 0.0    | 83.7    |
| <b>Total</b>       | Lumens    | 24840.0  | 0.0    | 24840.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 322.8   | 1.3       |
| 10°-20°   | 1097.0  | 4.4       |
| 20°-30°   | 1962.6  | 7.9       |
| 30°-40°   | 3174.8  | 12.8      |
| 40°-50°   | 4592.9  | 18.5      |
| 50°-60°   | 5256.8  | 21.2      |
| 60°-70°   | 4835.7  | 19.5      |
| 70°-80°   | 2990.3  | 12.0      |
| 80°-90°   | 607.2   | 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°    | 24840.0 | 100.0     |
| 0°-180°   | 24840.0 | 100.0     |



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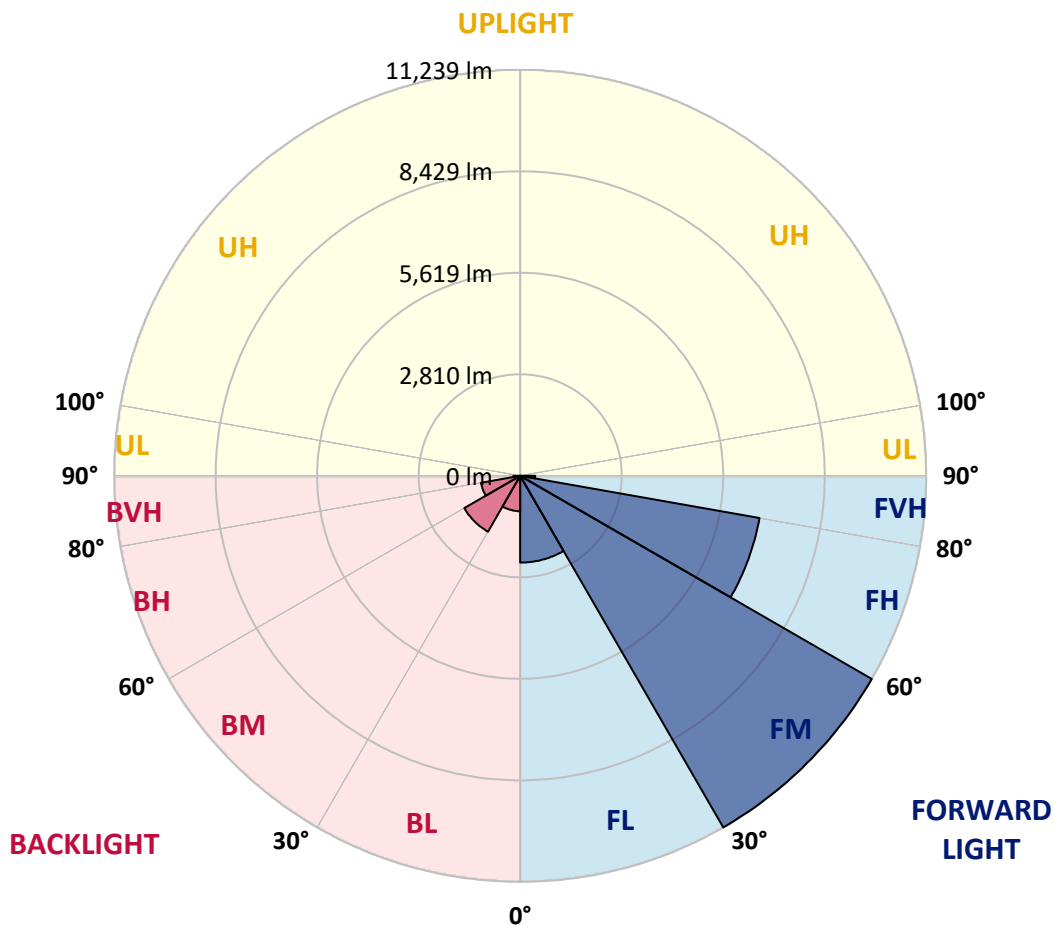
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2402.8  | 9.7       |                         |      |         |
| FM (30°-60°)   | 11238.9 | 45.2      |                         |      |         |
| FH (60°-80°)   | 6726.0  | 27.1      |                         |      | G3/7500 |
| FVH (80°-90°)  | 416.9   | 1.7       |                         |      | G3/500  |
| BL (0°-30°)    | 979.5   | 3.9       | B2/1000                 |      |         |
| BM (30°-60°)   | 1785.6  | 7.2       | B2/2500                 |      |         |
| BH (60°-80°)   | 1100.0  | 4.4       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 190.4   | 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°    | 3106.3  | 3106.3  | 3106.3  | 3106.3  | 3106.3  | 3106.3  | 3106.3  | 3106.3  | 3106.3  | 3106.3  | 3106.3  |
| 2.5°  | 3958.9  | 3929.5  | 3926.2  | 3880.5  | 3838.0  | 3723.7  | 3642.0  | 3498.3  | 3354.6  | 3351.3  | 3207.6  |
| 5°    | 4576.2  | 4546.8  | 4530.5  | 4475.0  | 4403.1  | 4252.9  | 4105.9  | 3883.8  | 3638.8  | 3622.4  | 3351.3  |
| 7.5°  | 4994.3  | 4968.2  | 4935.5  | 4912.7  | 4844.1  | 4710.2  | 4530.5  | 4265.9  | 3929.5  | 3896.8  | 3517.9  |
| 10°   | 5275.2  | 5258.9  | 5252.4  | 5236.0  | 5193.6  | 5085.8  | 4912.7  | 4631.8  | 4220.2  | 4184.3  | 3694.3  |
| 12.5° | 5396.1  | 5389.6  | 5419.0  | 5464.7  | 5481.0  | 5438.6  | 5272.0  | 5007.4  | 4540.3  | 4501.1  | 3906.6  |
| 15°   | 5255.6  | 5262.2  | 5337.3  | 5494.1  | 5660.7  | 5752.1  | 5654.1  | 5396.1  | 4902.9  | 4847.3  | 4154.9  |
| 17.5° | 5190.3  | 5200.1  | 5252.4  | 5402.6  | 5637.8  | 5922.0  | 5967.7  | 5765.2  | 5252.4  | 5174.0  | 4416.2  |
| 20°   | 5304.6  | 5317.7  | 5356.9  | 5474.5  | 5637.8  | 5941.6  | 6180.0  | 6118.0  | 5595.3  | 5513.7  | 4667.7  |
| 22.5° | 5595.3  | 5611.7  | 5608.4  | 5683.5  | 5794.6  | 6003.6  | 6297.6  | 6451.1  | 5954.7  | 5863.2  | 4929.0  |
| 25°   | 6216.0  | 6202.9  | 6091.8  | 6055.9  | 6085.3  | 6219.2  | 6454.4  | 6771.3  | 6330.3  | 6238.8  | 5203.4  |
| 27.5° | 7058.7  | 7042.4  | 6839.8  | 6656.9  | 6493.6  | 6552.4  | 6676.5  | 7029.3  | 6712.5  | 6607.9  | 5464.7  |
| 30°   | 7960.2  | 7940.6  | 7705.4  | 7408.2  | 7045.6  | 6960.7  | 6944.4  | 7254.7  | 7097.9  | 6986.8  | 5742.3  |
| 32.5° | 8838.9  | 8822.6  | 8571.0  | 8224.8  | 7725.0  | 7470.3  | 7313.5  | 7506.2  | 7535.6  | 7427.8  | 6046.1  |
| 35°   | 9639.2  | 9639.2  | 9423.6  | 9012.0  | 8446.9  | 8061.5  | 7803.4  | 7816.5  | 8038.6  | 7914.5  | 6392.3  |
| 37.5° | 10351.2 | 10348.0 | 10112.8 | 9707.7  | 9165.5  | 8724.6  | 8404.5  | 8192.1  | 8518.8  | 8411.0  | 6754.9  |
| 40°   | 10916.3 | 10893.5 | 10720.3 | 10367.6 | 9822.1  | 9384.4  | 9061.0  | 8633.1  | 9054.5  | 8956.5  | 7140.4  |
| 42.5° | 11327.9 | 11314.8 | 11197.2 | 10890.2 | 10370.8 | 9959.3  | 9737.1  | 9188.4  | 9662.0  | 9564.0  | 7591.1  |
| 45°   | 11487.9 | 11514.1 | 11514.1 | 11223.4 | 10811.8 | 10436.2 | 10338.2 | 9799.2  | 10318.6 | 10220.6 | 8074.5  |
| 47.5° | 11229.9 | 11298.5 | 11438.9 | 11458.5 | 11096.0 | 10841.2 | 10873.9 | 10413.3 | 10994.7 | 10942.4 | 8603.7  |
| 50°   | 10423.1 | 10550.5 | 10857.5 | 11412.8 | 11210.3 | 11151.5 | 11331.1 | 11040.4 | 11719.9 | 11703.5 | 9247.2  |
| 52.5° | 8342.4  | 8652.7  | 9609.8  | 10606.0 | 11131.9 | 11295.2 | 11785.2 | 11746.0 | 12654.0 | 12680.2 | 10086.6 |
| 55°   | 6398.9  | 6516.5  | 7623.8  | 9319.0  | 10651.7 | 11249.5 | 12089.0 | 12435.2 | 13666.6 | 13699.3 | 10857.5 |
| 57.5° | 5174.0  | 5252.4  | 5856.7  | 7623.8  | 9557.5  | 11001.2 | 12327.4 | 12837.0 | 14444.0 | 14529.0 | 11543.5 |
| 60°   | 4099.3  | 4213.7  | 4618.7  | 5833.8  | 8025.5  | 10403.5 | 12494.0 | 13284.5 | 15280.2 | 15407.6 | 12363.3 |
| 62.5° | 3047.6  | 3103.1  | 3485.3  | 4321.4  | 6353.2  | 9328.8  | 12405.8 | 13771.2 | 16305.9 | 16459.4 | 13349.8 |
| 65°   | 2168.9  | 2217.9  | 2489.0  | 3073.7  | 4697.1  | 7875.3  | 11893.0 | 14133.7 | 17592.8 | 17749.6 | 14342.8 |
| 67.5° | 1623.4  | 1643.0  | 1796.5  | 2149.3  | 3165.1  | 6118.0  | 10854.3 | 14071.7 | 18533.6 | 18674.0 | 14741.3 |
| 70°   | 1283.7  | 1290.2  | 1365.4  | 1554.8  | 2057.8  | 4259.4  | 9034.9  | 13160.3 | 18602.2 | 18726.3 | 14238.2 |
| 72.5° | 1064.8  | 1061.6  | 1104.0  | 1195.5  | 1434.0  | 2694.8  | 6692.9  | 11468.3 | 17720.2 | 17805.2 | 12833.7 |
| 75°   | 878.7   | 885.2   | 914.6   | 966.9   | 1094.2  | 1776.9  | 4337.8  | 9149.2  | 15633.0 | 15541.5 | 10769.3 |
| 77.5° | 738.2   | 734.9   | 748.0   | 793.7   | 885.2   | 1277.2  | 2541.3  | 6611.2  | 11585.9 | 11540.2 | 7068.5  |
| 80°   | 594.5   | 601.0   | 620.6   | 659.8   | 744.7   | 973.4   | 1502.5  | 4125.5  | 6216.0  | 6049.4  | 3377.5  |
| 82.5° | 398.5   | 460.6   | 499.8   | 545.5   | 643.5   | 718.6   | 953.8   | 2097.0  | 2779.7  | 2737.2  | 1531.9  |
| 85°   | 189.5   | 251.5   | 372.4   | 424.6   | 522.6   | 450.8   | 646.7   | 999.5   | 1391.5  | 1375.2  | 552.0   |
| 87.5° | 39.2    | 39.2    | 199.3   | 238.4   | 323.4   | 192.7   | 359.3   | 434.4   | 672.9   | 630.4   | 225.4   |
| 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°    | 3106.3 | 3106.3 | 3106.3 | 3106.3 | 3106.3 | 3106.3 | 3106.3 | 3106.3 | 3106.3 | 3106.3 | 3106.3 |
| 2.5°  | 3122.7 | 3034.5 | 2858.1 | 2717.6 | 2573.9 | 2492.3 | 2391.0 | 2342.0 | 2332.2 | 2306.1 | 2325.7 |
| 5°    | 3178.2 | 3005.1 | 2671.9 | 2453.1 | 2306.1 | 2234.2 | 2198.3 | 2185.2 | 2182.0 | 2175.4 | 2175.4 |
| 7.5°  | 3253.3 | 2988.8 | 2554.3 | 2332.2 | 2237.5 | 2214.6 | 2224.4 | 2244.0 | 2247.3 | 2253.8 | 2250.6 |
| 10°   | 3344.8 | 2992.0 | 2489.0 | 2302.8 | 2257.1 | 2260.4 | 2293.0 | 2319.1 | 2332.2 | 2342.0 | 2338.7 |
| 12.5° | 3472.2 | 3031.2 | 2479.2 | 2322.4 | 2302.8 | 2315.9 | 2348.5 | 2374.7 | 2387.7 | 2391.0 | 2391.0 |
| 15°   | 3638.8 | 3112.9 | 2502.1 | 2364.9 | 2348.5 | 2358.3 | 2377.9 | 2387.7 | 2391.0 | 2387.7 | 2387.7 |
| 17.5° | 3821.7 | 3210.9 | 2534.7 | 2391.0 | 2364.9 | 2355.1 | 2348.5 | 2338.7 | 2319.1 | 2306.1 | 2306.1 |
| 20°   | 3998.1 | 3299.1 | 2551.1 | 2387.7 | 2342.0 | 2302.8 | 2263.6 | 2214.6 | 2182.0 | 2155.8 | 2155.8 |
| 22.5° | 4174.5 | 3380.7 | 2551.1 | 2351.8 | 2279.9 | 2204.8 | 2123.2 | 2044.8 | 1995.8 | 1963.1 | 1963.1 |
| 25°   | 4360.6 | 3459.1 | 2531.5 | 2289.7 | 2182.0 | 2074.2 | 1963.1 | 1865.1 | 1816.1 | 1783.5 | 1776.9 |
| 27.5° | 4517.4 | 3504.8 | 2479.2 | 2201.6 | 2061.1 | 1923.9 | 1796.5 | 1695.3 | 1659.3 | 1629.9 | 1629.9 |
| 30°   | 4684.0 | 3534.2 | 2381.2 | 2087.2 | 1923.9 | 1767.1 | 1636.5 | 1554.8 | 1515.6 | 1473.1 | 1469.9 |
| 32.5° | 4870.2 | 3553.8 | 2270.1 | 1966.4 | 1783.5 | 1616.9 | 1505.8 | 1440.5 | 1355.6 | 1309.8 | 1303.3 |
| 35°   | 5085.8 | 3580.0 | 2152.6 | 1829.2 | 1643.0 | 1492.7 | 1427.4 | 1319.6 | 1238.0 | 1198.8 | 1195.5 |
| 37.5° | 5314.4 | 3599.6 | 2025.2 | 1708.3 | 1515.6 | 1411.1 | 1345.8 | 1218.4 | 1146.5 | 1087.7 | 1081.2 |
| 40°   | 5556.1 | 3599.6 | 1894.5 | 1590.7 | 1414.4 | 1375.2 | 1251.0 | 1136.7 | 1015.9 | 986.5  | 979.9  |
| 42.5° | 5824.0 | 3593.0 | 1763.9 | 1476.4 | 1319.6 | 1293.5 | 1195.5 | 1074.6 | 1012.6 | 986.5  | 979.9  |
| 45°   | 6108.2 | 3570.2 | 1639.7 | 1345.8 | 1221.6 | 1169.4 | 1094.2 | 1061.6 | 1035.4 | 1035.4 | 1035.4 |
| 47.5° | 6431.5 | 3550.6 | 1499.3 | 1228.2 | 1149.8 | 1091.0 | 1035.4 | 1015.9 | 1012.6 | 1022.4 | 1032.2 |
| 50°   | 6846.4 | 3544.0 | 1381.7 | 1143.2 | 1094.2 | 1025.7 | 1019.1 | 1002.8 | 1006.1 | 1006.1 | 1006.1 |
| 52.5° | 7349.4 | 3485.3 | 1270.6 | 1081.2 | 1038.7 | 957.1  | 976.7  | 993.0  | 999.5  | 996.3  | 993.0  |
| 55°   | 7718.5 | 3380.7 | 1175.9 | 1038.7 | 999.5  | 930.9  | 957.1  | 983.2  | 989.7  | 979.9  | 979.9  |
| 57.5° | 8051.7 | 3233.7 | 1100.8 | 1006.1 | 973.4  | 914.6  | 944.0  | 970.1  | 963.6  | 960.3  | 957.1  |
| 60°   | 8433.8 | 3093.3 | 1042.0 | 989.7  | 947.3  | 908.1  | 934.2  | 950.5  | 940.7  | 934.2  | 930.9  |
| 62.5° | 8848.7 | 2956.1 | 999.5  | 989.7  | 927.7  | 904.8  | 924.4  | 930.9  | 911.3  | 904.8  | 904.8  |
| 65°   | 9041.4 | 2740.5 | 953.8  | 989.7  | 917.9  | 898.3  | 904.8  | 898.3  | 878.7  | 878.7  | 875.4  |
| 67.5° | 8724.6 | 2384.5 | 895.0  | 976.7  | 930.9  | 888.5  | 875.4  | 865.6  | 842.7  | 842.7  | 836.2  |
| 70°   | 7849.2 | 1959.8 | 810.1  | 934.2  | 934.2  | 885.2  | 836.2  | 813.3  | 787.2  | 797.0  | 783.9  |
| 72.5° | 6705.9 | 1554.8 | 705.5  | 862.3  | 914.6  | 881.9  | 793.7  | 757.8  | 734.9  | 744.7  | 725.1  |
| 75°   | 5432.0 | 1205.3 | 581.4  | 748.0  | 865.6  | 865.6  | 751.3  | 702.3  | 676.1  | 676.1  | 653.3  |
| 77.5° | 3462.4 | 891.7  | 473.6  | 620.6  | 777.4  | 842.7  | 715.3  | 640.2  | 601.0  | 591.2  | 574.9  |
| 80°   | 1714.9 | 627.1  | 388.7  | 493.2  | 663.1  | 790.5  | 689.2  | 568.4  | 512.8  | 493.2  | 463.8  |
| 82.5° | 911.3  | 434.4  | 310.3  | 385.4  | 529.2  | 712.1  | 656.5  | 490.0  | 421.4  | 392.0  | 359.3  |
| 85°   | 408.3  | 267.8  | 248.2  | 294.0  | 401.8  | 584.7  | 591.2  | 401.8  | 323.4  | 385.4  | 284.2  |
| 87.5° | 150.3  | 120.9  | 120.9  | 150.3  | 231.9  | 245.0  | 418.1  | 258.0  | 205.8  | 140.5  | 111.1  |
| 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)