

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: P399768

Luminaire Tested: **ARCH-L-PA3-190-727-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399768  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-190-727-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18470.1 lumens  
Efficiency: N/A  
Efficacy: 97.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

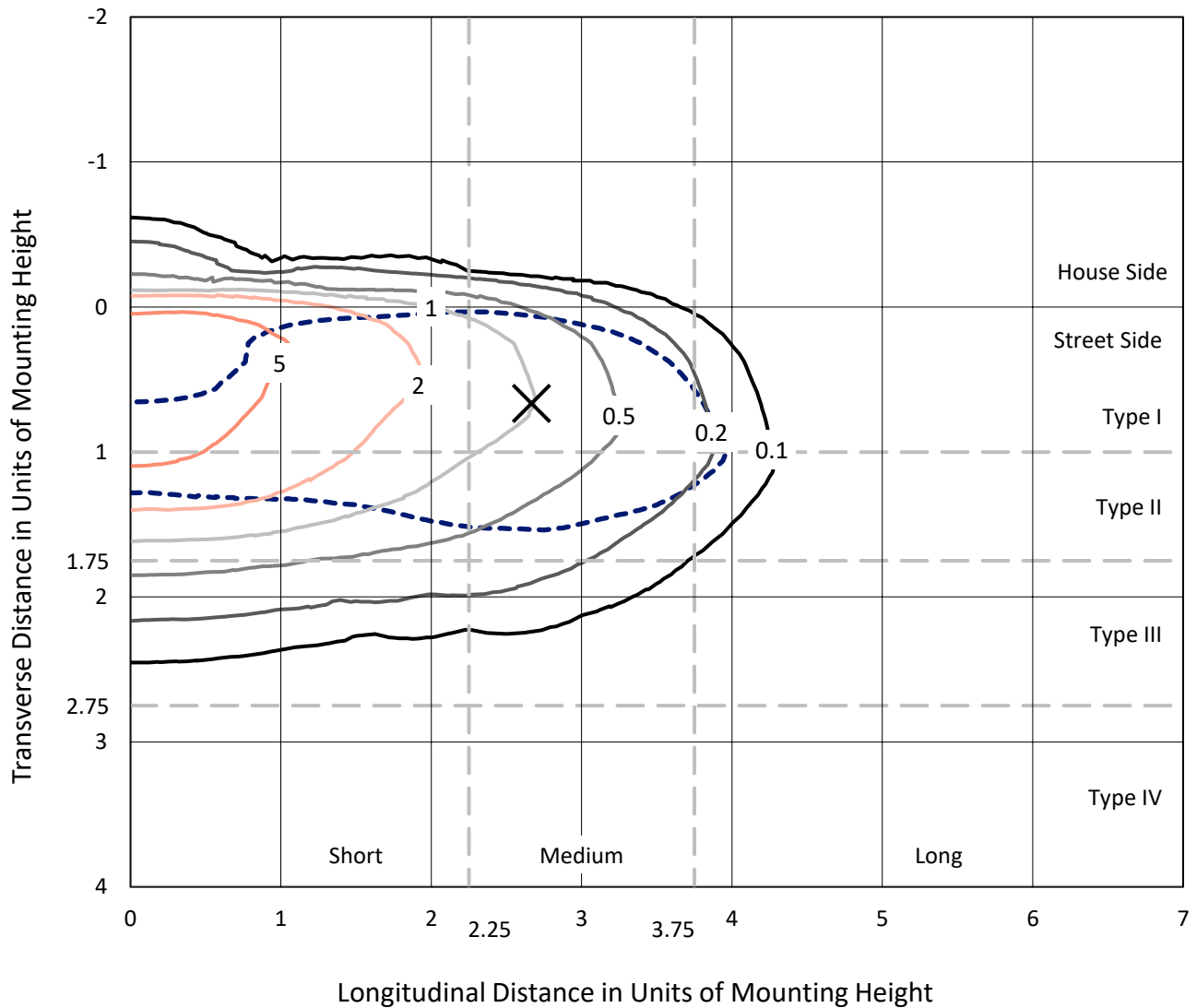
Input Watts (W): 189  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

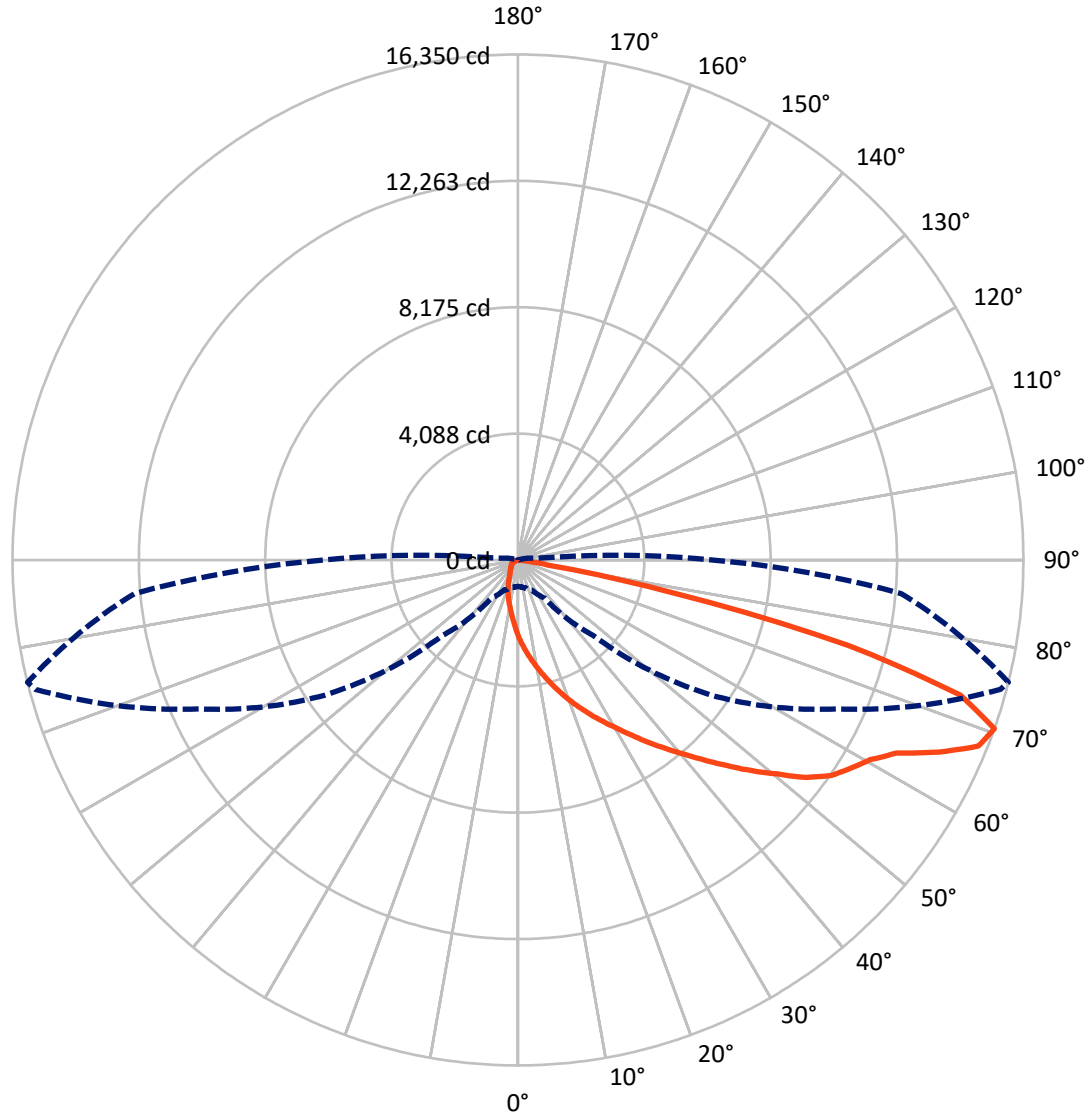
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 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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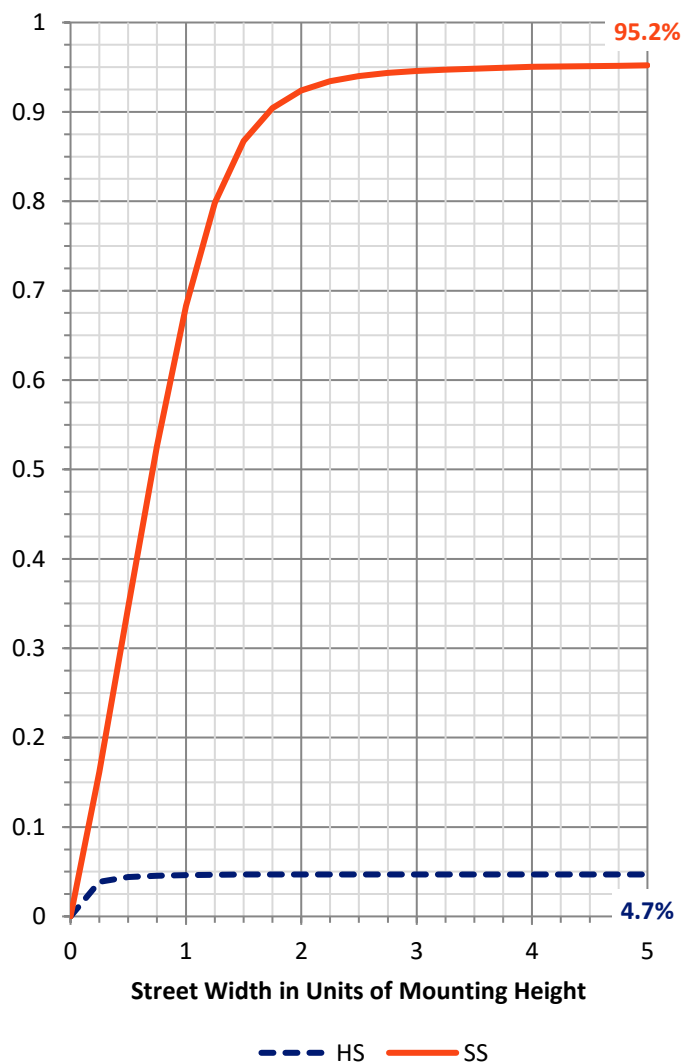
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 871.1    | 0.0    | 871.1   |
|                    | % Fixture | 4.7      | 0.0    | 4.7     |
| <b>Street Side</b> | Lumens    | 17598.9  | 0.0    | 17598.9 |
|                    | % Fixture | 95.3     | 0.0    | 95.3    |
| <b>Total</b>       | Lumens    | 18470.1  | 0.0    | 18470.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 232.9   | 1.3       |
| 10°-20°   | 751.7   | 4.1       |
| 20°-30°   | 1400.0  | 7.6       |
| 30°-40°   | 2476.3  | 13.4      |
| 40°-50°   | 3786.8  | 20.5      |
| 50°-60°   | 4293.3  | 23.2      |
| 60°-70°   | 3680.4  | 19.9      |
| 70°-80°   | 1782.6  | 9.7       |
| 80°-90°   | 66.1    | 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°    | 18470.1 | 100.0     |
| 0°-180°   | 18470.1 | 100.0     |

**Coefficient of Utilization**



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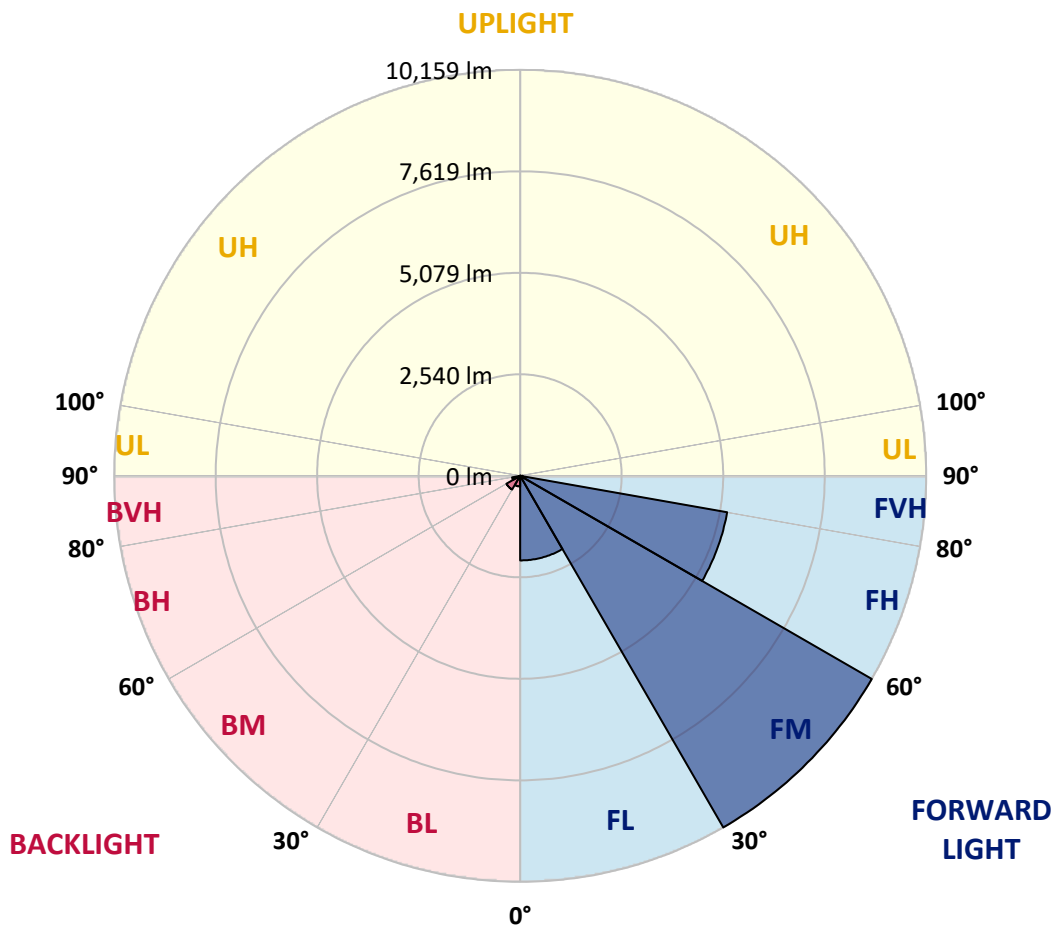
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2117.4  | 11.5      |                         |      |         |
| FM (30°-60°)   | 10158.7 | 55.0      |                         |      |         |
| FH (60°-80°)   | 5257.9  | 28.5      |                         |      | G3/7500 |
| FVH (80°-90°)  | 65.0    | 0.4       |                         |      | G1/100  |
| BL (0°-30°)    | 267.2   | 1.4       | B1/500                  |      |         |
| BM (30°-60°)   | 397.7   | 2.2       | B1/1000                 |      |         |
| BH (60°-80°)   | 205.1   | 1.1       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 1.1     | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2472.3  | 2472.3  | 2472.3  | 2472.3  | 2472.3  | 2472.3  | 2472.3  | 2472.3  | 2472.3  | 2472.3  | 2472.3  |
| 2.5°  | 3379.5  | 3361.0  | 3342.6  | 3271.8  | 3207.3  | 3148.8  | 3038.1  | 2893.6  | 2764.5  | 2736.8  | 2586.1  |
| 5°    | 3969.9  | 3948.3  | 3920.7  | 3849.9  | 3766.9  | 3668.5  | 3505.5  | 3284.1  | 3056.6  | 3007.4  | 2727.6  |
| 7.5°  | 4369.6  | 4351.2  | 4311.2  | 4277.4  | 4194.3  | 4099.0  | 3917.6  | 3659.3  | 3345.6  | 3284.1  | 2890.5  |
| 10°   | 4643.3  | 4631.0  | 4624.9  | 4597.2  | 4535.7  | 4458.8  | 4277.4  | 4006.8  | 3637.8  | 3567.0  | 3062.7  |
| 12.5° | 4741.7  | 4741.7  | 4772.5  | 4818.6  | 4827.8  | 4803.2  | 4637.2  | 4366.5  | 3945.3  | 3871.5  | 3265.7  |
| 15°   | 4609.5  | 4624.9  | 4692.5  | 4840.1  | 4993.9  | 5095.3  | 4990.8  | 4738.6  | 4283.5  | 4203.6  | 3505.5  |
| 17.5° | 4572.6  | 4588.0  | 4634.1  | 4763.2  | 4969.3  | 5239.9  | 5292.1  | 5098.4  | 4603.3  | 4535.7  | 3751.5  |
| 20°   | 4677.1  | 4692.5  | 4732.5  | 4843.2  | 5000.0  | 5273.7  | 5492.0  | 5445.9  | 4941.6  | 4870.9  | 4000.6  |
| 22.5° | 4926.2  | 4935.4  | 4935.4  | 5021.5  | 5159.9  | 5362.9  | 5618.1  | 5774.9  | 5289.1  | 5212.2  | 4246.6  |
| 25°   | 5461.3  | 5442.8  | 5369.0  | 5326.0  | 5415.1  | 5581.2  | 5778.0  | 6064.0  | 5676.5  | 5572.0  | 4511.1  |
| 27.5° | 6162.4  | 6223.9  | 6045.5  | 5839.5  | 5771.8  | 5867.2  | 6002.5  | 6319.2  | 6051.7  | 5941.0  | 4750.9  |
| 30°   | 7112.6  | 7088.0  | 6854.3  | 6559.0  | 6266.9  | 6233.1  | 6279.2  | 6537.5  | 6426.8  | 6322.3  | 5018.5  |
| 32.5° | 7893.6  | 7939.7  | 7693.7  | 7334.0  | 6897.3  | 6691.3  | 6642.1  | 6798.9  | 6826.6  | 6758.9  | 5335.2  |
| 35°   | 8696.2  | 8745.4  | 8505.5  | 8105.8  | 7586.1  | 7241.7  | 7100.3  | 7121.8  | 7321.7  | 7235.6  | 5667.3  |
| 37.5° | 9415.8  | 9458.8  | 9222.0  | 8813.1  | 8293.4  | 7872.1  | 7669.1  | 7503.1  | 7801.4  | 7724.5  | 6017.8  |
| 40°   | 9963.1  | 9969.3  | 9809.4  | 9443.4  | 8951.4  | 8514.8  | 8284.1  | 7958.2  | 8308.7  | 8256.5  | 6383.8  |
| 42.5° | 10350.6 | 10362.9 | 10246.0 | 9932.4  | 9477.3  | 9071.4  | 8883.8  | 8496.3  | 8893.0  | 8846.9  | 6808.1  |
| 45°   | 10532.0 | 10553.5 | 10541.2 | 10252.2 | 9873.9  | 9523.4  | 9461.9  | 9068.3  | 9532.6  | 9489.6  | 7297.1  |
| 47.5° | 10359.8 | 10359.8 | 10516.6 | 10476.6 | 10129.2 | 9895.5  | 9966.2  | 9664.8  | 10227.6 | 10187.6 | 7795.2  |
| 50°   | 9643.3  | 9652.5  | 9972.3  | 10430.5 | 10227.6 | 10175.3 | 10396.7 | 10249.1 | 10857.9 | 10882.5 | 8391.8  |
| 52.5° | 7761.4  | 7746.0  | 8825.4  | 9704.8  | 10159.9 | 10301.4 | 10793.4 | 10845.6 | 11614.4 | 11688.2 | 8985.3  |
| 55°   | 5799.5  | 5790.3  | 6823.5  | 8419.4  | 9686.4  | 10236.8 | 11014.8 | 11377.6 | 12260.2 | 12306.3 | 9428.1  |
| 57.5° | 4591.0  | 4566.4  | 5135.3  | 6786.6  | 8616.2  | 9947.7  | 11024.0 | 11479.1 | 12619.9 | 12699.9 | 9858.6  |
| 60°   | 3530.1  | 3508.6  | 3933.0  | 5049.2  | 7100.3  | 9179.0  | 10759.5 | 11485.3 | 12967.4 | 13108.9 | 10436.7 |
| 62.5° | 2524.6  | 2549.2  | 2875.2  | 3622.4  | 5461.3  | 8093.5  | 10415.1 | 11571.4 | 13585.5 | 13745.4 | 11257.7 |
| 65°   | 1703.6  | 1691.3  | 1961.9  | 2466.2  | 3883.8  | 6632.9  | 9886.2  | 11752.8 | 14698.7 | 14978.5 | 12241.7 |
| 67.5° | 1183.9  | 1193.1  | 1316.1  | 1605.2  | 2466.2  | 5092.3  | 9006.8  | 11854.3 | 15848.7 | 16067.1 | 12930.5 |
| 70°   | 854.9   | 867.2   | 934.8   | 1079.3  | 1506.8  | 3453.3  | 7613.8  | 11389.9 | 16159.3 | 16350.0 | 12450.8 |
| 72.5° | 562.7   | 587.3   | 688.8   | 765.7   | 962.5   | 2161.7  | 5608.9  | 9812.4  | 14821.7 | 14963.1 | 10445.9 |
| 75°   | 304.4   | 310.6   | 442.8   | 572.0   | 685.7   | 1346.9  | 3345.6  | 6617.5  | 11088.6 | 11042.5 | 6888.1  |
| 77.5° | 236.8   | 246.0   | 273.7   | 409.0   | 461.3   | 741.1   | 1322.3  | 2988.9  | 5252.2  | 5110.7  | 2349.3  |
| 80°   | 144.5   | 150.7   | 190.7   | 242.9   | 322.9   | 430.5   | 387.5   | 811.8   | 1067.0  | 999.4   | 344.4   |
| 82.5° | 86.1    | 92.3    | 113.8   | 203.0   | 255.2   | 203.0   | 135.3   | 196.8   | 199.9   | 196.8   | 86.1    |
| 85°   | 15.4    | 15.4    | 80.0    | 141.5   | 135.3   | 58.4    | 80.0    | 64.6    | 58.4    | 61.5    | 18.5    |
| 87.5° | 0.0     | 0.0     | 30.8    | 43.1    | 61.5    | 21.5    | 30.8    | 15.4    | 15.4    | 15.4    | 9.2     |
| 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°    | 2472.3 | 2472.3 | 2472.3 | 2472.3 | 2472.3 | 2472.3 | 2472.3 | 2472.3 | 2472.3 | 2472.3 | 2472.3 |
| 2.5°  | 2493.9 | 2389.3 | 2174.0 | 1986.5 | 1798.9 | 1660.5 | 1556.0 | 1448.3 | 1411.4 | 1365.3 | 1340.7 |
| 5°    | 2536.9 | 2330.9 | 1903.4 | 1562.1 | 1273.1 | 1051.7 | 910.2  | 824.1  | 768.8  | 728.8  | 719.6  |
| 7.5°  | 2601.5 | 2284.8 | 1685.1 | 1223.9 | 907.1  | 685.7  | 568.9  | 510.5  | 479.7  | 461.3  | 455.1  |
| 10°   | 2678.4 | 2244.8 | 1469.9 | 953.3  | 639.6  | 482.8  | 418.2  | 393.6  | 381.3  | 375.2  | 372.1  |
| 12.5° | 2786.0 | 2229.4 | 1288.4 | 734.9  | 482.8  | 396.7  | 362.9  | 347.5  | 338.3  | 329.0  | 326.0  |
| 15°   | 2927.4 | 2235.6 | 1122.4 | 568.9  | 399.8  | 353.6  | 326.0  | 310.6  | 298.3  | 289.1  | 289.1  |
| 17.5° | 3075.0 | 2244.8 | 959.4  | 461.3  | 362.9  | 322.9  | 292.1  | 270.6  | 261.4  | 252.2  | 249.1  |
| 20°   | 3213.4 | 2241.7 | 802.6  | 393.6  | 329.0  | 289.1  | 258.3  | 236.8  | 221.4  | 212.2  | 212.2  |
| 22.5° | 3345.6 | 2223.3 | 655.0  | 353.6  | 301.4  | 255.2  | 221.4  | 199.9  | 187.6  | 178.4  | 178.4  |
| 25°   | 3487.1 | 2186.3 | 535.1  | 322.9  | 267.5  | 224.5  | 190.7  | 169.1  | 159.9  | 150.7  | 150.7  |
| 27.5° | 3597.8 | 2124.8 | 436.7  | 295.2  | 236.8  | 193.7  | 163.0  | 144.5  | 135.3  | 129.2  | 129.2  |
| 30°   | 3717.7 | 2035.7 | 362.9  | 264.5  | 206.0  | 166.1  | 138.4  | 123.0  | 113.8  | 110.7  | 110.7  |
| 32.5° | 3849.9 | 1937.3 | 310.6  | 233.7  | 175.3  | 141.5  | 116.9  | 107.6  | 98.4   | 95.3   | 95.3   |
| 35°   | 4003.7 | 1851.2 | 279.8  | 203.0  | 153.8  | 119.9  | 101.5  | 92.3   | 86.1   | 86.1   | 86.1   |
| 37.5° | 4179.0 | 1762.0 | 252.2  | 178.4  | 132.2  | 101.5  | 86.1   | 83.0   | 80.0   | 76.9   | 76.9   |
| 40°   | 4369.6 | 1666.7 | 227.6  | 156.8  | 113.8  | 86.1   | 73.8   | 73.8   | 70.7   | 70.7   | 70.7   |
| 42.5° | 4584.9 | 1583.6 | 206.0  | 138.4  | 98.4   | 73.8   | 64.6   | 64.6   | 61.5   | 61.5   | 61.5   |
| 45°   | 4818.6 | 1506.8 | 187.6  | 123.0  | 86.1   | 64.6   | 58.4   | 55.4   | 52.3   | 52.3   | 52.3   |
| 47.5° | 5095.3 | 1463.7 | 172.2  | 107.6  | 73.8   | 55.4   | 49.2   | 46.1   | 43.1   | 40.0   | 40.0   |
| 50°   | 5449.0 | 1482.2 | 156.8  | 89.2   | 64.6   | 46.1   | 40.0   | 36.9   | 33.8   | 30.8   | 30.8   |
| 52.5° | 5728.8 | 1472.9 | 135.3  | 76.9   | 52.3   | 36.9   | 30.8   | 27.7   | 24.6   | 21.5   | 21.5   |
| 55°   | 5931.7 | 1436.0 | 116.9  | 64.6   | 40.0   | 30.8   | 24.6   | 18.5   | 15.4   | 15.4   | 15.4   |
| 57.5° | 6131.6 | 1399.1 | 98.4   | 52.3   | 30.8   | 21.5   | 15.4   | 12.3   | 12.3   | 12.3   | 12.3   |
| 60°   | 6442.2 | 1346.9 | 86.1   | 43.1   | 24.6   | 15.4   | 9.2    | 9.2    | 6.2    | 6.2    | 6.2    |
| 62.5° | 6820.4 | 1282.3 | 70.7   | 36.9   | 18.5   | 12.3   | 6.2    | 6.2    | 0.0    | 0.0    | 0.0    |
| 65°   | 7235.6 | 1168.5 | 58.4   | 27.7   | 15.4   | 9.2    | 6.2    | 0.0    | 0.0    | 0.0    | 0.0    |
| 67.5° | 7140.2 | 937.9  | 49.2   | 18.5   | 12.3   | 6.2    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 6316.1 | 633.5  | 40.0   | 15.4   | 9.2    | 6.2    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 4947.7 | 375.2  | 27.7   | 12.3   | 6.2    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 3167.3 | 187.6  | 18.5   | 9.2    | 6.2    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 1060.9 | 92.3   | 12.3   | 6.2    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 150.7  | 30.8   | 6.2    | 3.1    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 33.8   | 12.3   | 3.1    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 12.3   | 6.2    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 6.2    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 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)