

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: P400025

Luminaire Tested: **ARCH-L-PA3-220-760-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400025  
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-PA3-220-760-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5700K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30953 lumens  
Efficiency: N/A  
Efficacy: 139.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

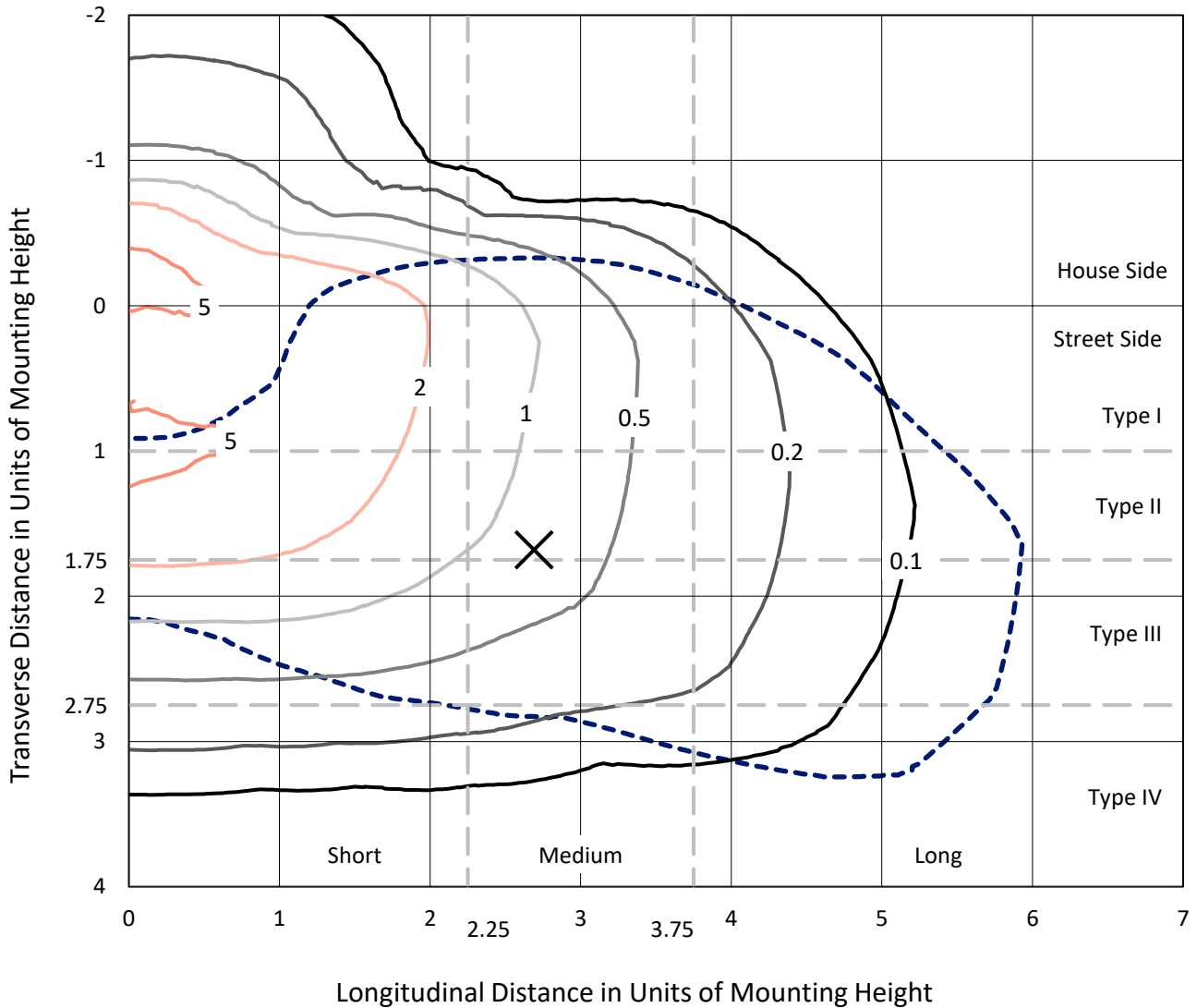
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

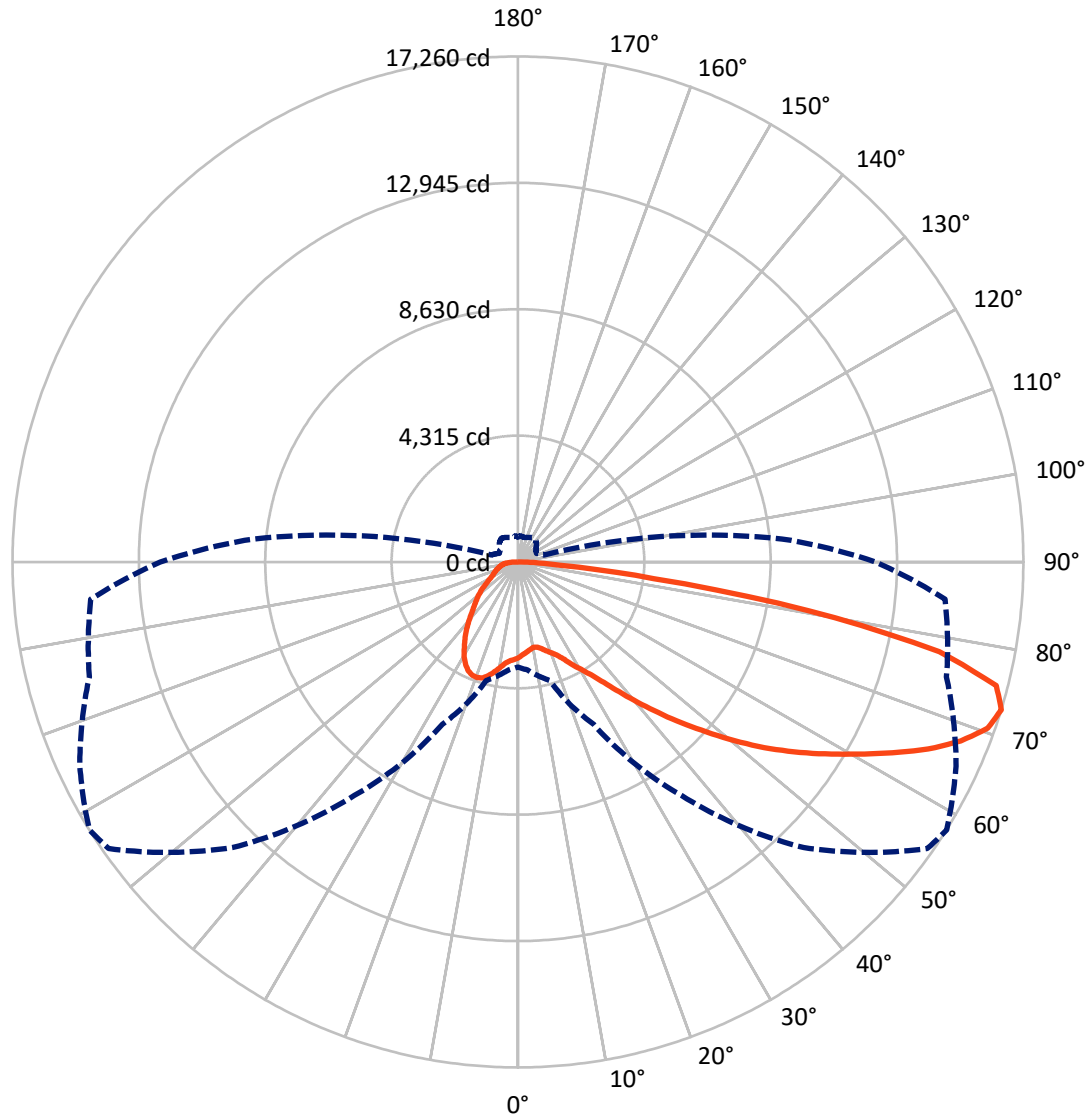
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 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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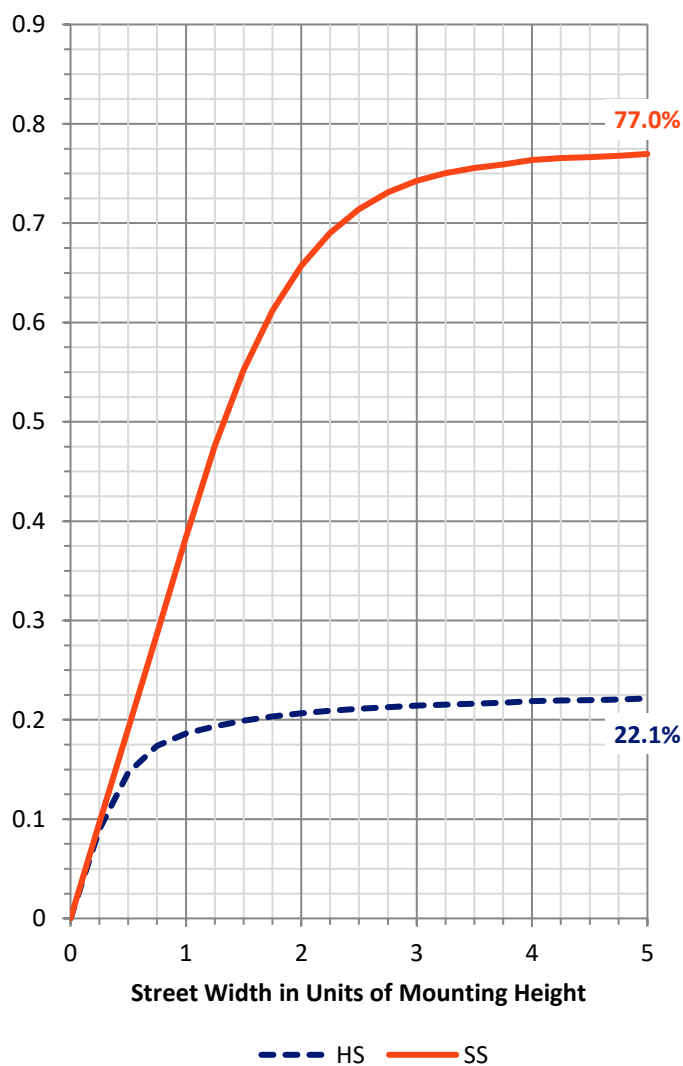
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7019.8   | 0.0    | 7019.8  |
|                    | % Fixture | 22.7     | 0.0    | 22.7    |
| <b>Street Side</b> | Lumens    | 23933.2  | 0.0    | 23933.2 |
|                    | % Fixture | 77.3     | 0.0    | 77.3    |
| <b>Total</b>       | Lumens    | 30953.0  | 0.0    | 30953.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 314.5   | 1.0       |
| 10°-20°   | 998.8   | 3.2       |
| 20°-30°   | 1789.2  | 5.8       |
| 30°-40°   | 2691.4  | 8.7       |
| 40°-50°   | 4358.4  | 14.1      |
| 50°-60°   | 6560.8  | 21.2      |
| 60°-70°   | 7721.4  | 24.9      |
| 70°-80°   | 5475.2  | 17.7      |
| 80°-90°   | 1043.3  | 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°    | 30953.0 | 100.0     |
| 0°-180°   | 30953.0 | 100.0     |

**Coefficient of Utilization**



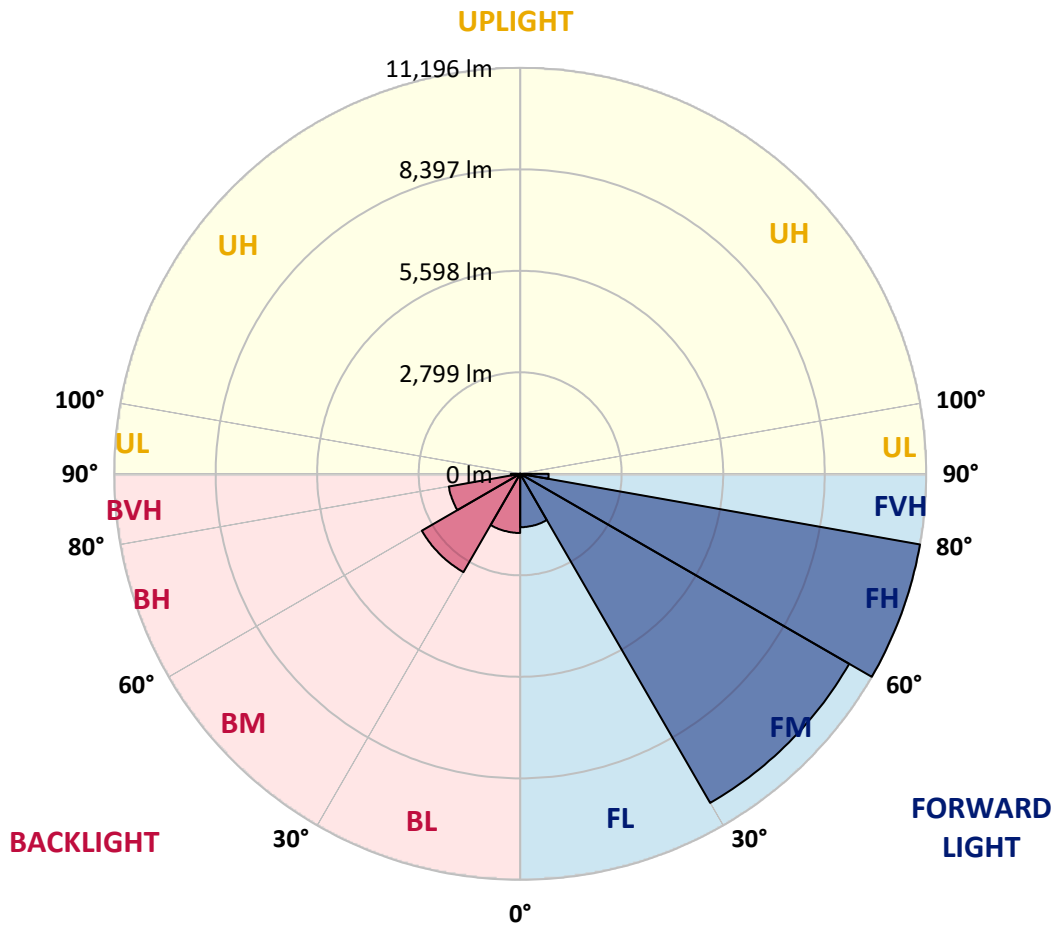
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 1472.0  | 4.8       |                         |      |          |
| FM (30°-60°)   | 10478.5 | 33.9      |                         |      |          |
| FH (60°-80°)   | 11195.8 | 36.2      |                         |      | G4/12000 |
| FVH (80°-90°)  | 786.9   | 2.5       |                         |      | G5       |
| BL (0°-30°)    | 1630.6  | 5.3       | B3/2500                 |      |          |
| BM (30°-60°)   | 3132.2  | 10.1      | B3/5000                 |      |          |
| BH (60°-80°)   | 2000.7  | 6.5       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 256.3   | 0.8       |                         |      | G3/500   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G5**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 58°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3264.9  | 3264.9  | 3264.9  | 3264.9  | 3264.9  | 3264.9  | 3264.9  | 3264.9  | 3264.9  | 3264.9  | 3264.9  |
| 2.5°  | 3142.3  | 3126.0  | 3130.0  | 3130.0  | 3146.4  | 3154.6  | 3158.6  | 3170.9  | 3179.1  | 3199.5  | 3228.1  |
| 5°    | 2995.2  | 2982.9  | 2987.0  | 2991.1  | 3019.7  | 3048.3  | 3072.8  | 3089.2  | 3113.7  | 3146.4  | 3187.2  |
| 7.5°  | 2889.0  | 2880.8  | 2884.9  | 2893.0  | 2917.6  | 2950.2  | 2991.1  | 3015.6  | 3052.4  | 3113.7  | 3183.2  |
| 10°   | 2811.3  | 2811.3  | 2815.4  | 2831.7  | 2856.3  | 2897.1  | 2929.8  | 2958.4  | 3032.0  | 3142.3  | 3248.5  |
| 12.5° | 2750.0  | 2750.0  | 2762.3  | 2795.0  | 2835.8  | 2876.7  | 2954.3  | 2987.0  | 3085.1  | 3236.3  | 3363.0  |
| 15°   | 2745.9  | 2750.0  | 2754.1  | 2782.7  | 2827.7  | 2917.6  | 3032.0  | 3081.0  | 3199.5  | 3379.3  | 3526.4  |
| 17.5° | 2811.3  | 2815.4  | 2799.1  | 2807.2  | 2860.3  | 2987.0  | 3138.2  | 3195.4  | 3346.6  | 3542.7  | 3693.9  |
| 20°   | 3011.5  | 3011.5  | 2962.5  | 2917.6  | 2954.3  | 3093.3  | 3264.9  | 3322.1  | 3489.6  | 3706.2  | 3857.4  |
| 22.5° | 3420.2  | 3440.6  | 3326.2  | 3228.1  | 3170.9  | 3248.5  | 3403.8  | 3465.1  | 3653.1  | 3886.0  | 4037.2  |
| 25°   | 3914.6  | 3935.0  | 3779.7  | 3640.8  | 3534.6  | 3522.3  | 3624.5  | 3689.8  | 3845.1  | 4086.2  | 4212.9  |
| 27.5° | 4392.7  | 4355.9  | 4212.9  | 4082.1  | 3947.3  | 3837.0  | 3914.6  | 3971.8  | 4151.6  | 4335.5  | 4413.1  |
| 30°   | 4768.6  | 4740.0  | 4601.1  | 4507.1  | 4380.4  | 4237.4  | 4192.5  | 4253.7  | 4400.9  | 4572.5  | 4613.3  |
| 32.5° | 5185.4  | 5165.0  | 5026.0  | 4903.5  | 4797.2  | 4662.4  | 4564.3  | 4592.9  | 4674.6  | 4797.2  | 4821.7  |
| 35°   | 5716.6  | 5761.6  | 5614.5  | 5365.2  | 5246.7  | 5115.9  | 5046.5  | 5054.6  | 5115.9  | 5193.6  | 5152.7  |
| 37.5° | 6276.4  | 6329.5  | 6337.7  | 5945.4  | 5786.1  | 5667.6  | 5594.0  | 5622.6  | 5696.2  | 5749.3  | 5622.6  |
| 40°   | 7314.3  | 7261.2  | 7048.7  | 6758.6  | 6513.4  | 6399.0  | 6296.9  | 6292.8  | 6345.9  | 6439.9  | 6211.0  |
| 42.5° | 8691.4  | 8642.3  | 8213.3  | 7837.4  | 7449.2  | 7318.4  | 7118.2  | 7032.4  | 7056.9  | 7175.4  | 6856.7  |
| 45°   | 10011.2 | 9990.8  | 9647.5  | 9210.3  | 8744.5  | 8491.1  | 8033.5  | 7825.1  | 7804.7  | 7898.6  | 7518.6  |
| 47.5° | 11184.0 | 11094.1 | 10844.8 | 10505.7 | 10456.6 | 9794.7  | 8952.9  | 8670.9  | 8572.9  | 8626.0  | 8201.0  |
| 50°   | 12438.4 | 12132.0 | 11788.7 | 11580.3 | 11935.8 | 11318.8 | 9880.5  | 9586.3  | 9345.2  | 9381.9  | 8940.6  |
| 52.5° | 13104.5 | 12589.6 | 12364.9 | 12426.2 | 12904.3 | 12667.3 | 10889.8 | 10530.2 | 10142.0 | 10195.1 | 9676.2  |
| 55°   | 12532.4 | 12528.3 | 12626.4 | 13006.4 | 13672.5 | 13398.7 | 11850.0 | 11445.5 | 11020.5 | 11032.8 | 10522.0 |
| 57.5° | 11747.9 | 11907.2 | 12413.9 | 13251.6 | 14624.6 | 14166.9 | 12793.9 | 12364.9 | 11976.7 | 11915.4 | 11482.3 |
| 60°   | 11032.8 | 11208.5 | 11944.0 | 13210.7 | 14955.5 | 14869.7 | 13692.9 | 13317.0 | 13002.3 | 12822.5 | 12491.6 |
| 62.5° | 9945.8  | 10076.6 | 11118.6 | 12949.2 | 14677.7 | 15376.4 | 14604.1 | 14346.7 | 14109.7 | 13737.8 | 13578.5 |
| 65°   | 8666.9  | 8711.8  | 9811.0  | 12087.0 | 14330.3 | 15572.6 | 15511.3 | 15396.8 | 15168.0 | 14620.5 | 14653.2 |
| 67.5° | 7281.6  | 7371.5  | 8335.9  | 10710.0 | 13570.3 | 15482.7 | 16214.1 | 16308.1 | 16038.4 | 15217.1 | 15339.6 |
| 70°   | 5806.5  | 5916.8  | 6648.3  | 8805.8  | 12279.1 | 15094.5 | 16863.8 | 17015.0 | 16496.0 | 15413.2 | 15466.3 |
| 72.5° | 3591.8  | 3698.0  | 4188.4  | 6117.1  | 9733.4  | 13791.0 | 17064.0 | 17260.2 | 16508.3 | 15151.7 | 14640.9 |
| 75°   | 1242.2  | 1254.5  | 1638.6  | 2933.9  | 5777.9  | 10411.7 | 16410.2 | 16872.0 | 15989.3 | 14199.6 | 12740.8 |
| 77.5° | 568.0   | 588.4   | 727.3   | 1209.5  | 2562.1  | 5618.5  | 13549.9 | 14706.3 | 14412.1 | 12712.2 | 9806.9  |
| 80°   | 392.3   | 400.4   | 502.6   | 723.3   | 1479.2  | 1977.7  | 8552.4  | 10060.3 | 10575.1 | 9843.7  | 6284.6  |
| 82.5° | 294.2   | 302.4   | 388.2   | 490.3   | 1066.5  | 960.3   | 3256.7  | 4674.6  | 5810.6  | 5704.4  | 2627.4  |
| 85°   | 281.9   | 277.9   | 302.4   | 326.9   | 711.0   | 572.1   | 1054.2  | 1446.5  | 2267.8  | 1941.0  | 662.0   |
| 87.5° | 122.6   | 134.8   | 310.6   | 183.9   | 371.8   | 265.6   | 457.7   | 535.3   | 690.6   | 600.7   | 237.0   |
| 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°    | 3264.9  | 3264.9  | 3264.9 | 3264.9 | 3264.9 | 3264.9 | 3264.9 | 3264.9 | 3264.9 | 3264.9 | 3264.9 |
| 2.5°  | 3240.4  | 3248.5  | 3273.1 | 3309.8 | 3330.3 | 3371.1 | 3399.7 | 3416.1 | 3428.3 | 3432.4 | 3432.4 |
| 5°    | 3211.8  | 3228.1  | 3281.2 | 3342.5 | 3399.7 | 3485.5 | 3563.2 | 3608.1 | 3640.8 | 3653.1 | 3657.2 |
| 7.5°  | 3219.9  | 3260.8  | 3338.4 | 3428.3 | 3501.9 | 3612.2 | 3706.2 | 3796.1 | 3869.6 | 3898.2 | 3898.2 |
| 10°   | 3297.6  | 3354.8  | 3461.0 | 3579.5 | 3673.5 | 3787.9 | 3886.0 | 3963.6 | 4049.4 | 4098.5 | 4106.6 |
| 12.5° | 3416.1  | 3485.5  | 3624.5 | 3755.2 | 3861.5 | 3951.4 | 4041.3 | 4098.5 | 4139.3 | 4176.1 | 4184.3 |
| 15°   | 3583.6  | 3669.4  | 3808.3 | 3943.2 | 4037.2 | 4094.4 | 4118.9 | 4118.9 | 4114.8 | 4118.9 | 4127.1 |
| 17.5° | 3751.1  | 3832.9  | 3971.8 | 4106.6 | 4151.6 | 4118.9 | 4090.3 | 4082.1 | 4078.0 | 4069.9 | 4074.0 |
| 20°   | 3914.6  | 3992.2  | 4110.7 | 4212.9 | 4176.1 | 4061.7 | 4024.9 | 4020.8 | 4008.6 | 4000.4 | 3992.2 |
| 22.5° | 4078.0  | 4135.2  | 4233.3 | 4270.1 | 4123.0 | 3959.5 | 3914.6 | 3890.1 | 3873.7 | 3853.3 | 3832.9 |
| 25°   | 4266.0  | 4282.4  | 4355.9 | 4298.7 | 3992.2 | 3771.6 | 3706.2 | 3669.4 | 3653.1 | 3632.6 | 3616.3 |
| 27.5° | 4441.7  | 4441.7  | 4454.0 | 4253.7 | 3800.2 | 3522.3 | 3424.2 | 3358.9 | 3354.8 | 3350.7 | 3346.6 |
| 30°   | 4601.1  | 4580.6  | 4539.8 | 4118.9 | 3550.9 | 3215.8 | 3068.7 | 3003.4 | 3027.9 | 3048.3 | 3052.4 |
| 32.5° | 4789.0  | 4748.2  | 4633.8 | 3935.0 | 3252.6 | 2872.6 | 2692.8 | 2664.2 | 2692.8 | 2717.3 | 2701.0 |
| 35°   | 5083.2  | 5009.7  | 4731.8 | 3722.5 | 2966.6 | 2558.0 | 2386.3 | 2345.5 | 2337.3 | 2333.2 | 2300.5 |
| 37.5° | 5504.1  | 5377.5  | 4809.5 | 3493.7 | 2684.6 | 2280.1 | 2153.4 | 2067.6 | 1990.0 | 1908.3 | 1896.0 |
| 40°   | 6019.0  | 5802.4  | 4862.6 | 3232.2 | 2386.3 | 2047.2 | 1912.3 | 1802.0 | 1671.3 | 1528.2 | 1511.9 |
| 42.5° | 6582.9  | 6260.1  | 4887.1 | 2942.1 | 2124.8 | 1855.1 | 1687.6 | 1548.7 | 1401.6 | 1291.2 | 1270.8 |
| 45°   | 7191.7  | 6754.5  | 4866.7 | 2664.2 | 1912.3 | 1691.7 | 1503.7 | 1352.5 | 1234.0 | 1156.4 | 1140.1 |
| 47.5° | 7784.2  | 7322.5  | 4809.5 | 2443.6 | 1748.9 | 1552.8 | 1360.7 | 1221.8 | 1131.9 | 1046.1 | 1025.6 |
| 50°   | 8544.3  | 7866.0  | 4740.0 | 2271.9 | 1569.1 | 1413.8 | 1270.8 | 1123.7 | 1021.6 | 980.7  | 972.5  |
| 52.5° | 9386.0  | 8409.4  | 4658.3 | 2055.4 | 1393.4 | 1303.5 | 1213.6 | 1082.8 | 1050.2 | 972.5  | 960.3  |
| 55°   | 10297.3 | 9055.0  | 4641.9 | 1781.6 | 1238.1 | 1225.9 | 1156.4 | 1119.6 | 1127.8 | 972.5  | 952.1  |
| 57.5° | 11257.5 | 9745.6  | 4678.7 | 1507.8 | 1111.4 | 1156.4 | 1180.9 | 1152.3 | 1140.1 | 992.9  | 952.1  |
| 60°   | 12258.6 | 10411.7 | 4568.4 | 1254.5 | 1013.4 | 1099.2 | 1209.5 | 1136.0 | 1046.1 | 984.8  | 956.2  |
| 62.5° | 13231.2 | 10971.5 | 4090.3 | 1074.7 | 939.8  | 1082.8 | 1193.2 | 1074.7 | 972.5  | 972.5  | 960.3  |
| 65°   | 13938.1 | 11220.7 | 3199.5 | 943.9  | 890.8  | 1062.4 | 1164.6 | 1033.8 | 952.1  | 980.7  | 964.3  |
| 67.5° | 14019.8 | 10963.3 | 2149.3 | 841.8  | 849.9  | 1025.6 | 1099.2 | 997.0  | 931.7  | 1005.2 | 980.7  |
| 70°   | 13517.2 | 10293.2 | 1315.8 | 764.1  | 796.8  | 960.3  | 1042.0 | 960.3  | 903.1  | 984.8  | 948.0  |
| 72.5° | 12213.7 | 9042.8  | 927.6  | 698.7  | 739.6  | 899.0  | 988.9  | 927.6  | 862.2  | 890.8  | 854.0  |
| 75°   | 10019.4 | 7007.9  | 735.5  | 637.4  | 682.4  | 841.8  | 943.9  | 878.5  | 813.2  | 800.9  | 776.4  |
| 77.5° | 7097.8  | 4490.7  | 592.5  | 588.4  | 621.1  | 772.3  | 882.6  | 821.3  | 755.9  | 731.4  | 715.1  |
| 80°   | 4082.1  | 2202.5  | 510.8  | 531.2  | 563.9  | 702.8  | 809.1  | 755.9  | 694.7  | 657.9  | 633.4  |
| 82.5° | 1560.9  | 768.2   | 449.5  | 461.7  | 498.5  | 629.3  | 735.5  | 690.6  | 629.3  | 662.0  | 555.7  |
| 85°   | 506.7   | 420.9   | 367.8  | 380.0  | 416.8  | 523.0  | 649.7  | 612.9  | 543.5  | 482.2  | 445.4  |
| 87.5° | 224.7   | 228.8   | 196.1  | 216.6  | 261.5  | 347.3  | 474.0  | 449.5  | 396.4  | 331.0  | 318.7  |
| 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)