

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: P836401

Luminaire Tested: **ARCH3-180-730-U-T3**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836401  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-180-730-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 23966 lumens  
Efficiency: N/A  
Efficacy: 132.8 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

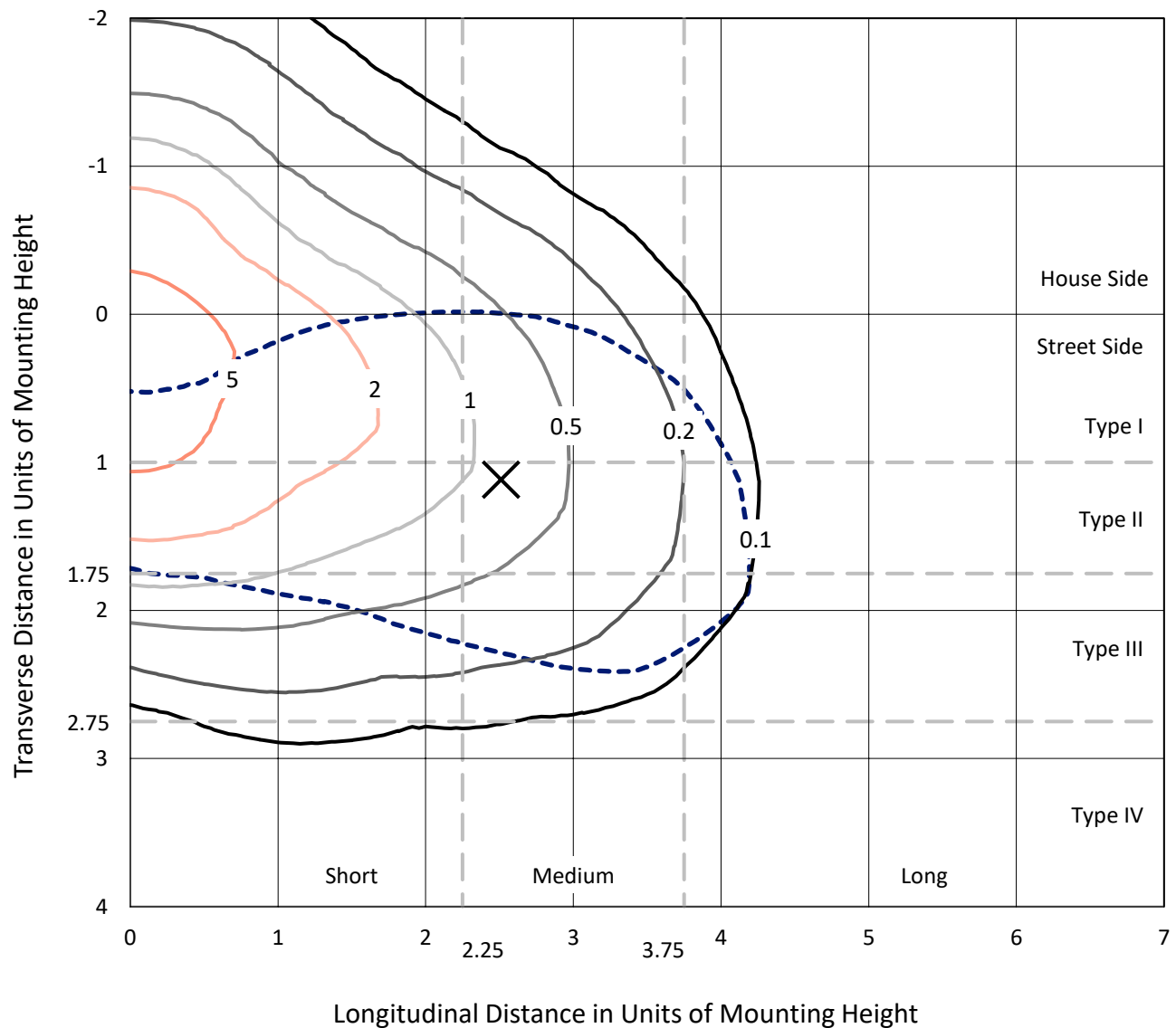
Input Watts (W): 180.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

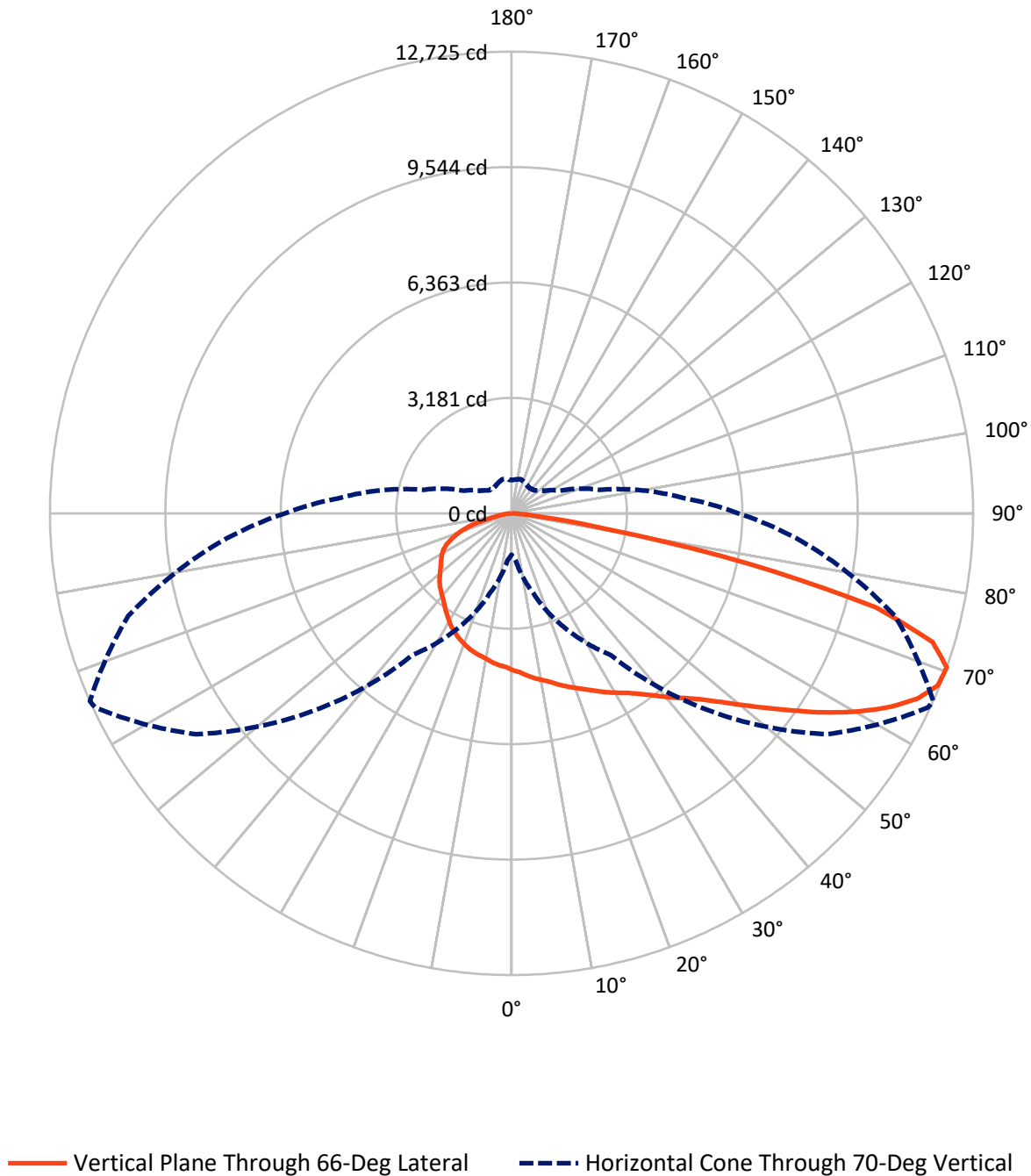
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
Type III - 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    | 6350.4   | 0.0    | 6350.4  |
|                    | % Fixture | 26.5     | 0.0    | 26.5    |
| <b>Street Side</b> | Lumens    | 17615.6  | 0.0    | 17615.6 |
|                    | % Fixture | 73.5     | 0.0    | 73.5    |
| <b>Total</b>       | Lumens    | 23966.0  | 0.0    | 23966.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 415.6   | 1.7       |
| 10°-20°   | 1246.7  | 5.2       |
| 20°-30°   | 2089.9  | 8.7       |
| 30°-40°   | 3129.2  | 13.1      |
| 40°-50°   | 4183.8  | 17.5      |
| 50°-60°   | 4884.7  | 20.4      |
| 60°-70°   | 4857.1  | 20.3      |
| 70°-80°   | 2875.5  | 12.0      |
| 80°-90°   | 283.4   | 1.2       |
| 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°    | 23966.0 | 100.0     |
| 0°-180°   | 23966.0 | 100.0     |

**Coefficient of Utilization**



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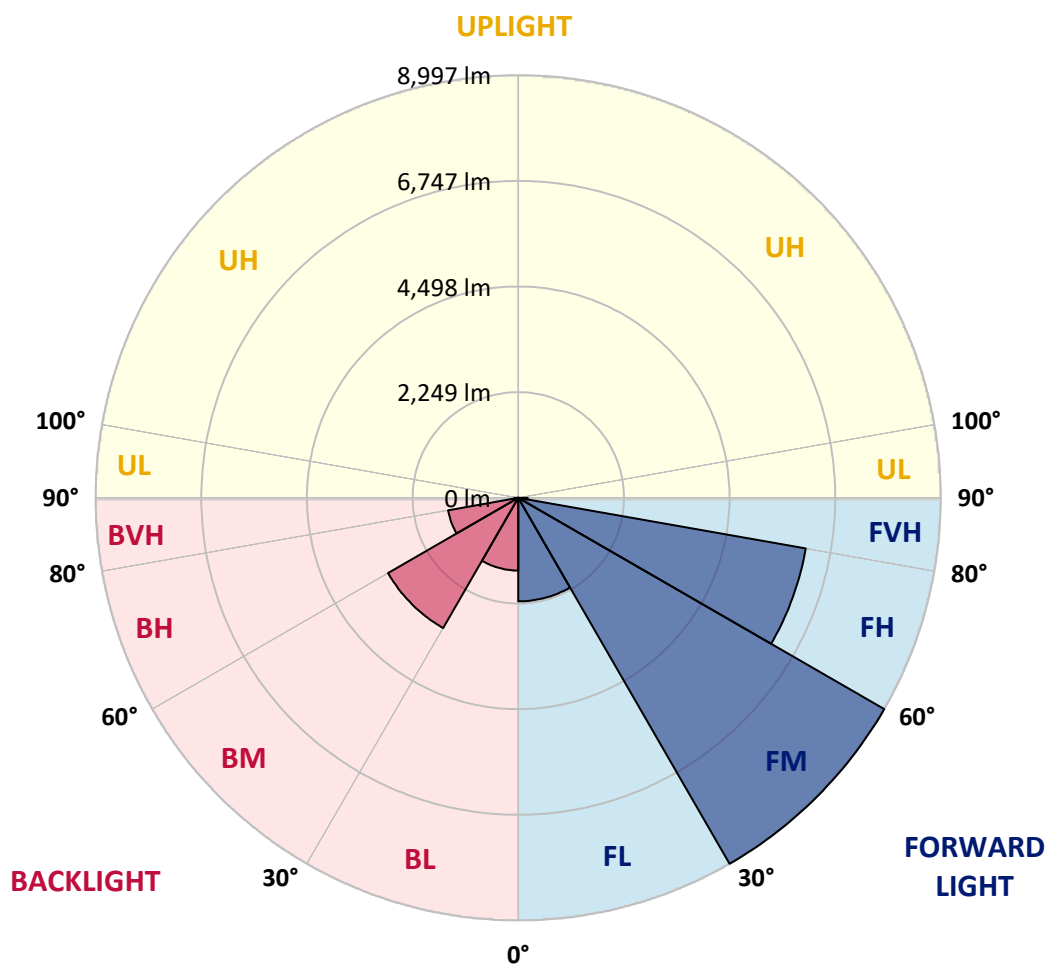
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2204.2 | 9.2       |                         |      |         |
| FM   | (30°-60°)   | 8996.5 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 6215.6 | 25.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 199.2  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1548.0 | 6.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3201.3 | 13.4      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1517.0 | 6.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 84.2   | 0.4       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 66°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| 0°    | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3  | 4325.3  | 4325.3  | 4325.3  | 4325.3 |
| 2.5°  | 4484.3 | 4477.3 | 4473.7 | 4459.6 | 4427.8 | 4441.9 | 4410.1  | 4388.9  | 4385.4  | 4335.9  | 4307.6 |
| 5°    | 4668.1 | 4664.6 | 4657.5 | 4636.3 | 4586.8 | 4593.9 | 4540.9  | 4502.0  | 4491.4  | 4413.7  | 4353.6 |
| 7.5°  | 4823.6 | 4816.5 | 4813.0 | 4784.7 | 4731.7 | 4728.2 | 4664.6  | 4608.0  | 4590.3  | 4484.3  | 4392.5 |
| 10°   | 4943.7 | 4933.1 | 4940.2 | 4911.9 | 4855.4 | 4844.8 | 4763.5  | 4689.3  | 4671.6  | 4537.3  | 4410.1 |
| 12.5° | 5046.2 | 5039.1 | 5049.7 | 5025.0 | 4979.1 | 4968.5 | 4887.2  | 4791.8  | 4770.6  | 4615.1  | 4449.0 |
| 15°   | 5159.3 | 5134.5 | 5155.7 | 5145.1 | 5113.3 | 5109.8 | 5035.6  | 4929.6  | 4901.3  | 4714.0  | 4509.1 |
| 17.5° | 5219.4 | 5205.2 | 5230.0 | 5233.5 | 5219.4 | 5244.1 | 5173.4  | 5046.2  | 5021.5  | 4805.9  | 4562.1 |
| 20°   | 5261.8 | 5240.6 | 5268.8 | 5290.0 | 5300.6 | 5350.1 | 5293.6  | 5169.9  | 5141.6  | 4894.3  | 4611.6 |
| 22.5° | 5406.6 | 5360.7 | 5364.2 | 5378.4 | 5385.4 | 5456.1 | 5420.8  | 5300.6  | 5272.4  | 5003.8  | 4671.6 |
| 25°   | 5770.6 | 5678.7 | 5618.7 | 5576.3 | 5526.8 | 5586.9 | 5565.7  | 5449.1  | 5424.3  | 5134.5  | 4745.8 |
| 27.5° | 6336.0 | 6219.4 | 6099.3 | 5975.6 | 5781.2 | 5756.5 | 5721.2  | 5615.1  | 5586.9  | 5265.3  | 4820.0 |
| 30°   | 6979.2 | 6862.6 | 6721.2 | 6523.3 | 6159.3 | 5968.5 | 5887.2  | 5770.6  | 5738.8  | 5381.9  | 4890.7 |
| 32.5° | 7618.8 | 7516.3 | 7374.9 | 7134.7 | 6615.2 | 6226.5 | 6053.3  | 5933.2  | 5901.4  | 5509.1  | 4975.5 |
| 35°   | 8117.0 | 8053.4 | 7961.6 | 7661.2 | 7067.5 | 6530.4 | 6293.6  | 6148.7  | 6113.4  | 5710.5  | 5131.0 |
| 37.5° | 8519.9 | 8473.9 | 8396.2 | 8081.7 | 7396.2 | 6834.3 | 6569.3  | 6403.2  | 6364.3  | 5929.6  | 5297.1 |
| 40°   | 9113.6 | 8993.4 | 8929.8 | 8473.9 | 7682.4 | 7109.9 | 6880.2  | 6707.1  | 6664.7  | 6162.9  | 5431.4 |
| 42.5° | 9618.9 | 9530.5 | 9452.8 | 8823.8 | 7954.5 | 7346.7 | 7173.5  | 7014.5  | 6958.0  | 6392.6  | 5576.3 |
| 45°   | 9703.7 | 9739.0 | 9700.2 | 8996.9 | 8385.6 | 7579.9 | 7470.4  | 7367.9  | 7314.9  | 6703.5  | 5795.4 |
| 47.5° | 9707.2 | 9707.2 | 9477.5 | 9095.9 | 8919.2 | 7841.4 | 7788.4  | 7823.7  | 7767.2  | 7099.3  | 6056.9 |
| 50°   | 9452.8 | 9498.7 | 9378.6 | 9120.6 | 9060.6 | 8102.9 | 8177.1  | 8367.9  | 8311.4  | 7519.8  | 6339.6 |
| 52.5° | 8926.3 | 9078.2 | 9074.7 | 9081.8 | 8855.6 | 8325.5 | 8587.0  | 9021.7  | 8926.3  | 7993.4  | 6639.9 |
| 55°   | 7996.9 | 8300.8 | 8572.9 | 8806.1 | 8678.9 | 8459.8 | 9088.8  | 9717.8  | 9618.9  | 8523.4  | 6943.8 |
| 57.5° | 7201.8 | 7396.2 | 7735.4 | 8396.2 | 8470.4 | 8576.4 | 9558.8  | 10445.8 | 10357.4 | 9110.0  | 7261.9 |
| 60°   | 6293.6 | 6562.2 | 6901.4 | 7841.4 | 8216.0 | 8728.4 | 10074.7 | 11156.1 | 11071.3 | 9703.7  | 7569.3 |
| 62.5° | 4897.8 | 5244.1 | 5922.6 | 6989.8 | 7844.9 | 8823.8 | 10481.1 | 11781.5 | 11742.7 | 10265.6 | 7844.9 |
| 65°   | 3413.6 | 3721.0 | 4671.6 | 5943.8 | 7254.8 | 8781.4 | 10806.2 | 12339.9 | 12304.5 | 10724.9 | 8039.3 |
| 67.5° | 1993.0 | 2349.9 | 3424.2 | 4784.7 | 6212.3 | 8488.1 | 10912.2 | 12668.5 | 12668.5 | 11004.1 | 8092.3 |
| 70°   | 1137.9 | 1304.0 | 2258.1 | 3487.8 | 4763.5 | 7678.9 | 10615.4 | 12665.0 | 12725.1 | 10940.5 | 7873.2 |
| 72.5° | 795.1  | 869.3  | 1519.5 | 2346.4 | 3229.9 | 6212.3 | 9838.0  | 12053.6 | 12134.9 | 10339.8 | 7124.1 |
| 75°   | 618.4  | 671.4  | 1070.7 | 1600.8 | 2035.4 | 4219.3 | 8138.2  | 10163.1 | 10378.6 | 8813.2  | 5760.0 |
| 77.5° | 470.0  | 508.9  | 625.5  | 1000.1 | 1304.0 | 2424.2 | 5371.3  | 6664.7  | 6678.8  | 5396.0  | 3088.5 |
| 80°   | 342.8  | 381.6  | 417.0  | 611.3  | 692.6  | 1134.3 | 2028.4  | 2784.6  | 2706.9  | 2611.4  | 1671.5 |
| 82.5° | 205.0  | 243.8  | 254.4  | 332.2  | 339.2  | 484.1  | 710.3   | 897.6   | 862.2   | 1148.5  | 784.5  |
| 85°   | 88.3   | 123.7  | 130.7  | 152.0  | 144.9  | 197.9  | 282.7   | 236.8   | 212.0   | 243.8   | 169.6  |
| 87.5° | 21.2   | 35.3   | 35.3   | 38.9   | 31.8   | 49.5   | 53.0    | 38.9    | 35.3    | 42.4    | 42.4   |
| 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°    | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3 | 4325.3 |
| 2.5°  | 4300.6 | 4290.0 | 4293.5 | 4233.4 | 4215.8 | 4198.1 | 4187.5 | 4180.4 | 4173.4 | 4184.0 | 4194.6 |
| 5°    | 4332.4 | 4307.6 | 4279.4 | 4191.0 | 4155.7 | 4116.8 | 4088.6 | 4063.8 | 4053.2 | 4053.2 | 4063.8 |
| 7.5°  | 4357.1 | 4314.7 | 4254.6 | 4138.0 | 4074.4 | 4021.4 | 3975.5 | 3943.7 | 3926.0 | 3926.0 | 3936.6 |
| 10°   | 4360.7 | 4300.6 | 4205.2 | 4063.8 | 3979.0 | 3901.3 | 3848.3 | 3812.9 | 3788.2 | 3788.2 | 3795.3 |
| 12.5° | 4381.9 | 4300.6 | 4176.9 | 4007.3 | 3901.3 | 3805.9 | 3742.2 | 3689.2 | 3678.6 | 3678.6 | 3685.7 |
| 15°   | 4417.2 | 4318.2 | 4159.2 | 3957.8 | 3830.6 | 3721.0 | 3650.4 | 3593.8 | 3572.6 | 3586.8 | 3590.3 |
| 17.5° | 4449.0 | 4328.9 | 4127.4 | 3894.2 | 3742.2 | 3622.1 | 3544.4 | 3494.9 | 3466.6 | 3498.4 | 3498.4 |
| 20°   | 4470.2 | 4328.9 | 4081.5 | 3812.9 | 3646.8 | 3512.6 | 3438.3 | 3378.3 | 3357.1 | 3395.9 | 3399.5 |
| 22.5° | 4502.0 | 4325.3 | 4032.0 | 3731.6 | 3544.4 | 3403.0 | 3328.8 | 3282.9 | 3272.3 | 3314.7 | 3328.8 |
| 25°   | 4537.3 | 4332.4 | 3979.0 | 3639.8 | 3431.3 | 3293.5 | 3236.9 | 3215.7 | 3222.8 | 3275.8 | 3293.5 |
| 27.5° | 4576.2 | 4346.5 | 3926.0 | 3537.3 | 3307.6 | 3183.9 | 3152.1 | 3162.7 | 3191.0 | 3258.1 | 3279.3 |
| 30°   | 4611.6 | 4350.1 | 3851.8 | 3417.1 | 3166.2 | 3049.6 | 3063.8 | 3109.7 | 3152.1 | 3219.3 | 3244.0 |
| 32.5° | 4657.5 | 4353.6 | 3774.1 | 3286.4 | 3014.3 | 2929.5 | 2993.1 | 3067.3 | 3109.7 | 3173.3 | 3201.6 |
| 35°   | 4770.6 | 4413.7 | 3714.0 | 3159.2 | 2872.9 | 2827.0 | 2933.0 | 3028.4 | 3053.2 | 3109.7 | 3134.4 |
| 37.5° | 4901.3 | 4512.6 | 3682.2 | 3028.4 | 2735.1 | 2724.5 | 2858.8 | 2954.2 | 2961.3 | 2996.6 | 3021.4 |
| 40°   | 4982.6 | 4555.0 | 3646.8 | 2918.9 | 2611.4 | 2618.5 | 2756.3 | 2830.5 | 2816.4 | 2841.1 | 2858.8 |
| 42.5° | 5063.9 | 4569.1 | 3572.6 | 2827.0 | 2494.8 | 2501.9 | 2607.9 | 2660.9 | 2668.0 | 2721.0 | 2745.7 |
| 45°   | 5201.7 | 4608.0 | 3491.4 | 2742.2 | 2388.8 | 2364.1 | 2427.7 | 2498.4 | 2590.2 | 2692.7 | 2721.0 |
| 47.5° | 5385.4 | 4689.3 | 3406.5 | 2639.7 | 2286.3 | 2205.1 | 2229.8 | 2353.5 | 2448.9 | 2544.3 | 2562.0 |
| 50°   | 5572.7 | 4770.6 | 3328.8 | 2516.0 | 2183.9 | 2035.4 | 2046.0 | 2159.1 | 2236.9 | 2311.1 | 2321.7 |
| 52.5° | 5756.5 | 4841.2 | 3261.7 | 2399.4 | 2067.2 | 1834.0 | 1876.4 | 1993.0 | 2046.0 | 2081.4 | 2092.0 |
| 55°   | 5940.2 | 4901.3 | 3201.6 | 2300.5 | 1933.0 | 1675.0 | 1713.9 | 1823.4 | 1876.4 | 1894.1 | 1901.2 |
| 57.5° | 6131.1 | 4972.0 | 3155.6 | 2215.7 | 1781.0 | 1533.7 | 1558.4 | 1636.1 | 1685.6 | 1706.8 | 1699.7 |
| 60°   | 6290.1 | 5032.1 | 3130.9 | 2127.3 | 1629.1 | 1402.9 | 1395.8 | 1466.5 | 1537.2 | 1558.4 | 1551.3 |
| 62.5° | 6413.8 | 5070.9 | 3092.0 | 2014.2 | 1494.8 | 1272.2 | 1236.8 | 1328.7 | 1402.9 | 1417.0 | 1427.6 |
| 65°   | 6480.9 | 5074.5 | 2996.6 | 1869.4 | 1357.0 | 1130.8 | 1106.1 | 1197.9 | 1243.9 | 1258.0 | 1258.0 |
| 67.5° | 6470.3 | 5017.9 | 2809.3 | 1675.0 | 1229.7 | 1003.6 | 982.4  | 1038.9 | 1106.1 | 1116.7 | 1106.1 |
| 70°   | 6251.2 | 4784.7 | 2509.0 | 1470.0 | 1077.8 | 890.5  | 851.6  | 908.2  | 971.8  | 932.9  | 915.2  |
| 72.5° | 5629.3 | 4180.4 | 2067.2 | 1243.9 | 908.2  | 749.2  | 731.5  | 788.0  | 791.6  | 798.6  | 781.0  |
| 75°   | 4441.9 | 3113.2 | 1547.8 | 968.2  | 735.0  | 629.0  | 625.5  | 614.9  | 629.0  | 657.3  | 636.1  |
| 77.5° | 2332.3 | 1554.9 | 837.5  | 593.7  | 533.6  | 505.3  | 480.6  | 477.1  | 519.5  | 537.1  | 515.9  |
| 80°   | 1265.1 | 872.8  | 480.6  | 356.9  | 325.1  | 328.6  | 360.4  | 353.4  | 399.3  | 409.9  | 392.2  |
| 82.5° | 551.3  | 413.4  | 236.8  | 215.6  | 215.6  | 212.0  | 222.6  | 247.4  | 296.8  | 296.8  | 236.8  |
| 85°   | 120.1  | 102.5  | 91.9   | 106.0  | 120.1  | 120.1  | 120.1  | 120.1  | 84.8   | 45.9   | 31.8   |
| 87.5° | 38.9   | 38.9   | 38.9   | 42.4   | 45.9   | 45.9   | 38.9   | 28.3   | 17.7   | 3.5    | 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)