

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: P835818

Luminaire Tested: **ARCH3-100-727-U-T4W**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P835818  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-100-727-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 805mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 14886 lumens  
Efficiency: N/A  
Efficacy: 145.1 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 102.6  
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

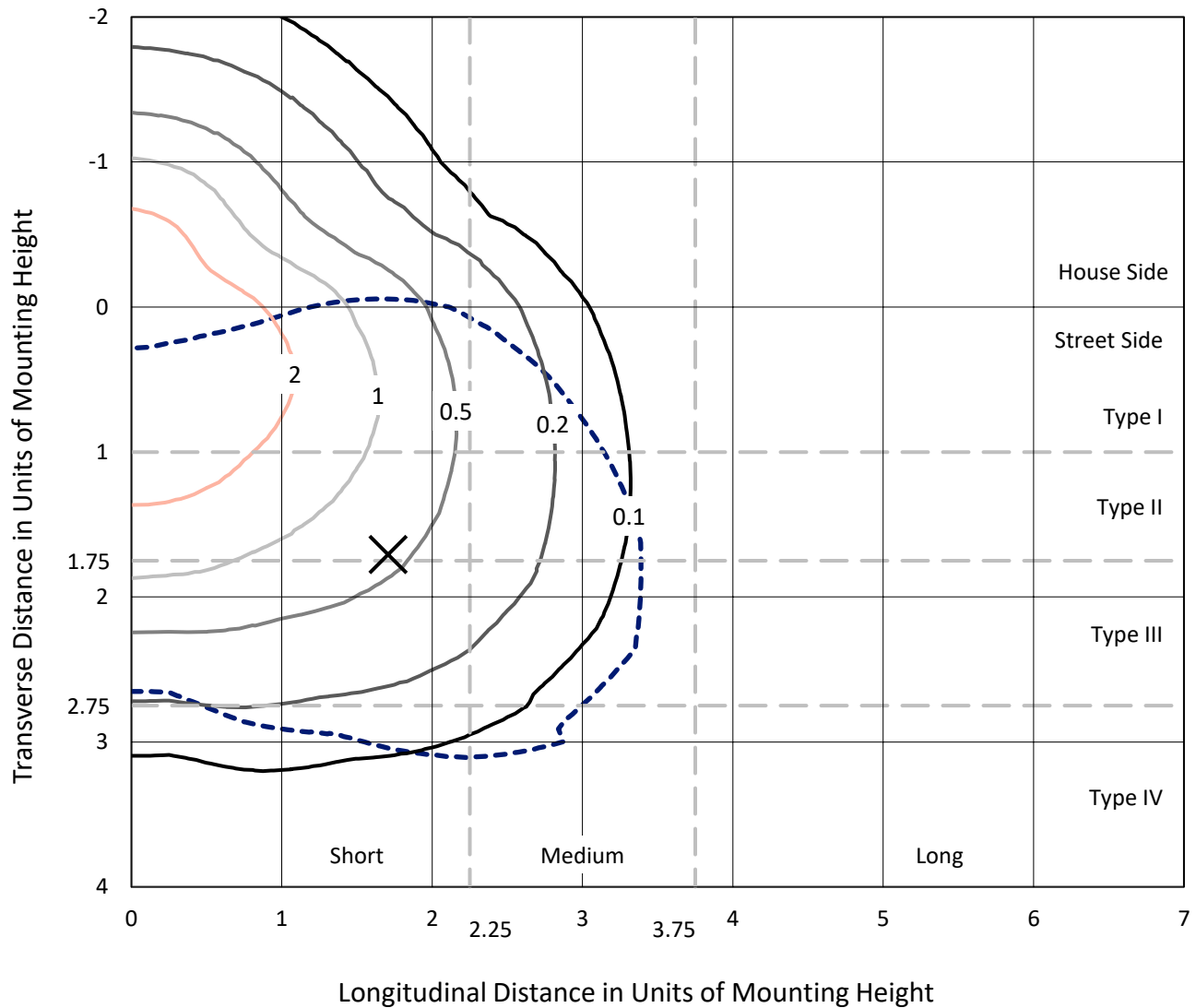


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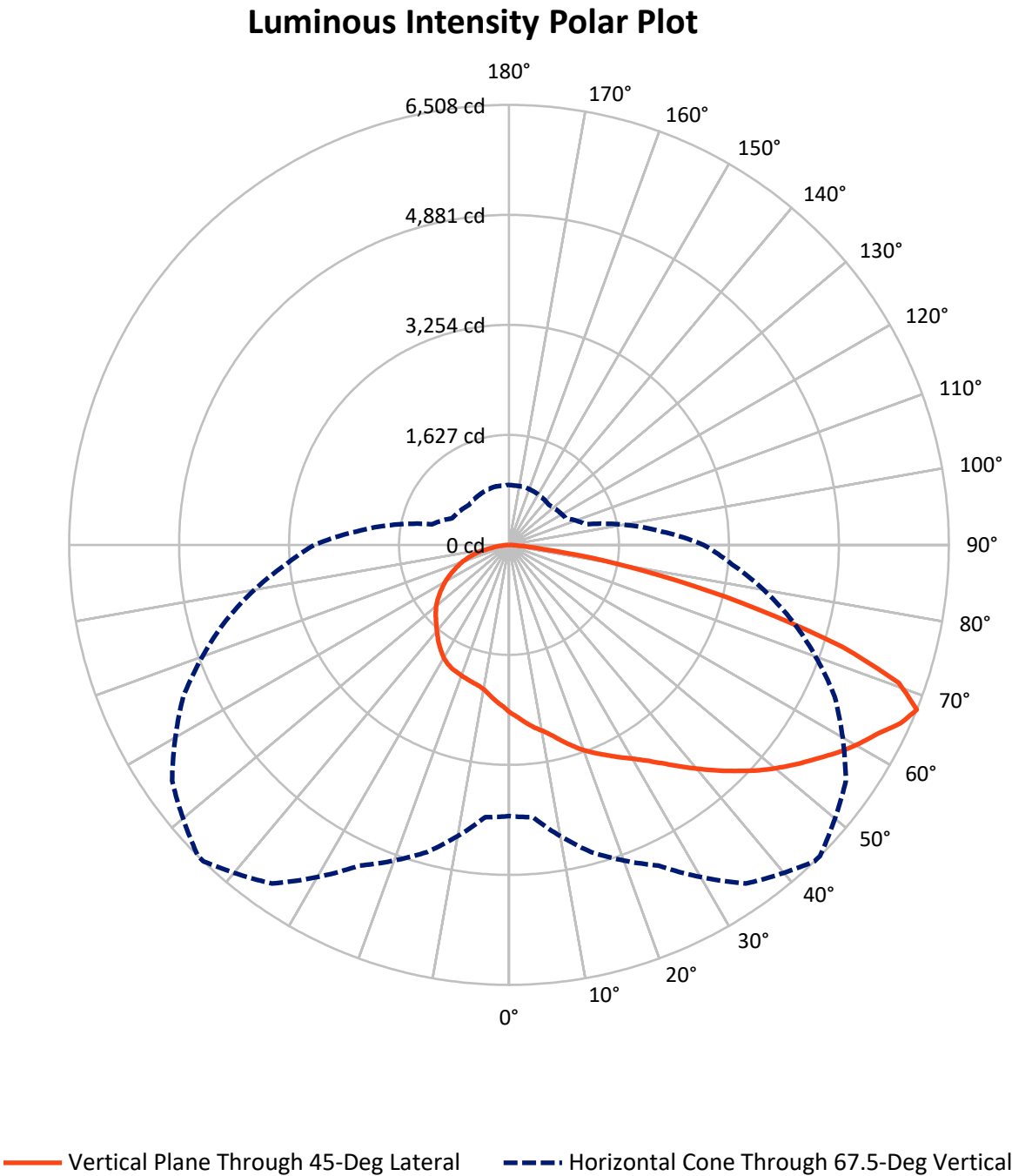
## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
Type IV - Short - N/A

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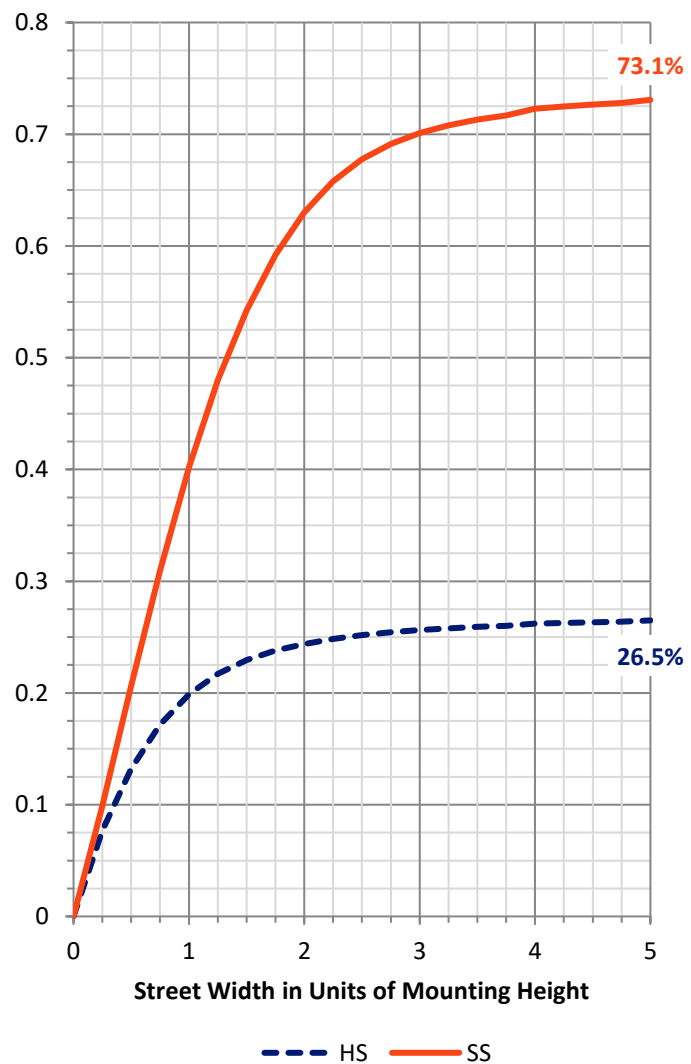
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3976.8   | 0.0    | 3976.8  |
|                    | % Fixture | 26.7     | 0.0    | 26.7    |
| <b>Street Side</b> | Lumens    | 10909.2  | 0.0    | 10909.2 |
|                    | % Fixture | 73.3     | 0.0    | 73.3    |
| <b>Total</b>       | Lumens    | 14886.0  | 0.0    | 14886.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 237.7   | 1.6       |
| 10°-20°   | 734.3   | 4.9       |
| 20°-30°   | 1267.5  | 8.5       |
| 30°-40°   | 1869.1  | 12.6      |
| 40°-50°   | 2532.3  | 17.0      |
| 50°-60°   | 3095.0  | 20.8      |
| 60°-70°   | 3192.1  | 21.4      |
| 70°-80°   | 1748.4  | 11.7      |
| 80°-90°   | 209.6   | 1.4       |
| 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°    | 14886.0 | 100.0     |
| 0°-180°   | 14886.0 | 100.0     |

**Coefficient of Utilization**



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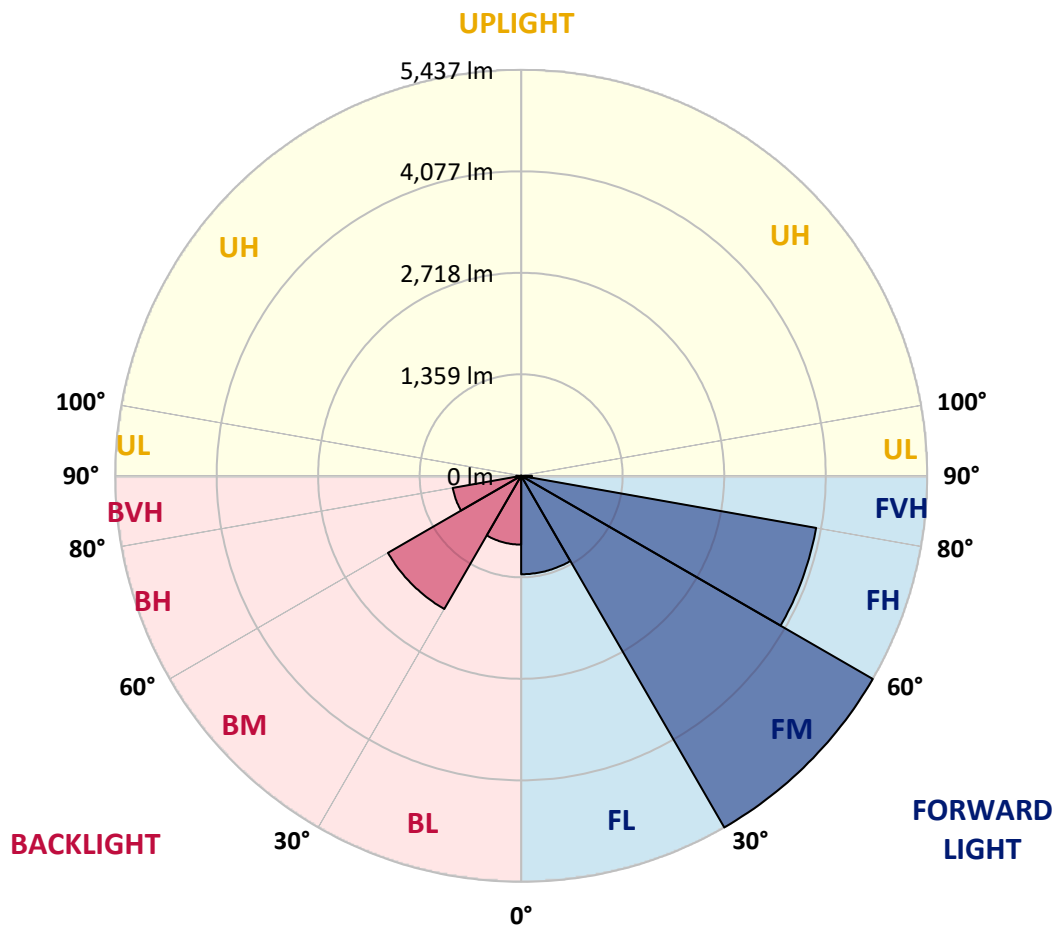
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1317.8 | 8.9       |                         |      |         |
| FM   | (30°-60°)   | 5436.5 | 36.5      |                         |      |         |
| FH   | (60°-80°)   | 4010.5 | 26.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 144.4  | 1.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 921.7  | 6.2       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 2059.9 | 13.8      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 930.0  | 6.2       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 65.2   | 0.4       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 44°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 |
| 2.5°  | 2591.4 | 2589.2 | 2593.7 | 2577.8 | 2557.5 | 2555.2 | 2555.2 | 2541.6 | 2525.7 | 2494.0 | 2469.1 |
| 5°    | 2713.8 | 2709.2 | 2711.5 | 2688.8 | 2661.7 | 2648.1 | 2645.8 | 2616.4 | 2580.1 | 2530.3 | 2485.0 |
| 7.5°  | 2827.0 | 2822.5 | 2820.2 | 2795.3 | 2754.5 | 2731.9 | 2729.6 | 2686.6 | 2643.5 | 2566.5 | 2500.8 |
| 10°   | 2933.5 | 2929.0 | 2924.4 | 2890.4 | 2840.6 | 2806.6 | 2802.1 | 2747.7 | 2693.4 | 2598.2 | 2514.4 |
| 12.5° | 3069.4 | 3060.3 | 3055.8 | 3015.0 | 2942.5 | 2906.3 | 2899.5 | 2827.0 | 2759.1 | 2643.5 | 2541.6 |
| 15°   | 3212.1 | 3205.3 | 3198.5 | 3160.0 | 3078.5 | 3030.9 | 3019.6 | 2929.0 | 2836.1 | 2702.4 | 2582.4 |
| 17.5° | 3318.6 | 3311.8 | 3311.8 | 3277.8 | 3203.0 | 3148.7 | 3139.6 | 3030.9 | 2915.4 | 2756.8 | 2614.1 |
| 20°   | 3384.3 | 3377.5 | 3384.3 | 3363.9 | 3307.2 | 3261.9 | 3252.9 | 3132.8 | 2994.6 | 2806.6 | 2641.3 |
| 22.5° | 3431.8 | 3425.0 | 3436.4 | 3427.3 | 3386.5 | 3359.4 | 3352.6 | 3234.8 | 3076.2 | 2858.7 | 2668.5 |
| 25°   | 3515.7 | 3515.7 | 3515.7 | 3499.8 | 3461.3 | 3452.2 | 3452.2 | 3350.3 | 3180.4 | 2926.7 | 2709.2 |
| 27.5° | 3683.3 | 3674.2 | 3662.9 | 3617.6 | 3551.9 | 3549.6 | 3563.2 | 3468.1 | 3300.5 | 3015.0 | 2759.1 |
| 30°   | 3930.2 | 3925.7 | 3882.6 | 3787.5 | 3676.5 | 3665.2 | 3674.2 | 3594.9 | 3429.6 | 3107.9 | 2815.7 |
| 32.5° | 4249.6 | 4233.7 | 4145.4 | 4002.7 | 3844.1 | 3792.0 | 3810.1 | 3726.3 | 3565.5 | 3203.0 | 2870.1 |
| 35°   | 4476.1 | 4480.6 | 4417.2 | 4288.1 | 4100.1 | 3961.9 | 3975.5 | 3873.6 | 3712.7 | 3309.5 | 2938.0 |
| 37.5° | 4736.6 | 4752.5 | 4657.3 | 4559.9 | 4385.5 | 4149.9 | 4163.5 | 4025.3 | 3860.0 | 3443.2 | 3010.5 |
| 40°   | 5096.8 | 5065.1 | 4904.2 | 4788.7 | 4596.2 | 4347.0 | 4358.3 | 4195.2 | 4029.9 | 3570.0 | 3094.3 |
| 42.5° | 5398.1 | 5341.4 | 5146.6 | 4999.4 | 4768.3 | 4555.4 | 4566.7 | 4378.7 | 4202.0 | 3710.5 | 3187.2 |
| 45°   | 5830.7 | 5674.4 | 5393.5 | 5321.0 | 4945.0 | 4759.3 | 4770.6 | 4573.5 | 4383.2 | 3860.0 | 3286.9 |
| 47.5° | 6082.2 | 5833.0 | 5654.0 | 5615.5 | 5139.8 | 4969.9 | 4983.5 | 4779.7 | 4578.0 | 4029.9 | 3391.1 |
| 50°   | 6066.3 | 5905.5 | 5853.4 | 5758.2 | 5312.0 | 5167.0 | 5180.6 | 4992.6 | 4775.1 | 4197.5 | 3490.7 |
| 52.5° | 5962.1 | 5991.6 | 5964.4 | 5805.8 | 5484.1 | 5357.3 | 5373.1 | 5203.3 | 4976.7 | 4353.8 | 3583.6 |
| 55°   | 6122.9 | 6143.3 | 6091.2 | 5882.8 | 5674.4 | 5547.6 | 5565.7 | 5425.2 | 5176.1 | 4492.0 | 3662.9 |
| 57.5° | 6315.5 | 6243.0 | 6190.9 | 6018.7 | 5871.5 | 5753.7 | 5774.1 | 5651.8 | 5348.2 | 4603.0 | 3724.1 |
| 60°   | 6306.4 | 6154.7 | 6206.8 | 6027.8 | 6005.1 | 5944.0 | 5962.1 | 5837.5 | 5479.6 | 4684.5 | 3749.0 |
| 62.5° | 5842.1 | 5760.5 | 6023.3 | 5962.1 | 6113.9 | 6113.9 | 6136.5 | 5950.8 | 5558.9 | 4718.5 | 3735.4 |
| 65°   | 5035.6 | 5040.2 | 5502.3 | 5756.0 | 6243.0 | 6347.2 | 6365.3 | 6021.0 | 5513.6 | 4618.8 | 3608.5 |
| 67.5° | 4011.7 | 4041.2 | 4704.9 | 5232.7 | 6113.9 | 6505.8 | 6508.0 | 6084.4 | 5318.8 | 4337.9 | 3314.0 |
| 70°   | 2935.8 | 2958.4 | 3742.2 | 4383.2 | 5504.5 | 6154.7 | 6118.4 | 5905.5 | 4895.2 | 3848.6 | 2854.2 |
| 72.5° | 1984.3 | 2004.7 | 2811.2 | 3366.1 | 4516.9 | 5241.8 | 5162.5 | 5219.1 | 4172.6 | 3162.3 | 2294.7 |
| 75°   | 1334.2 | 1359.1 | 2000.2 | 2407.9 | 3323.1 | 3980.0 | 3803.3 | 3952.8 | 3228.0 | 2394.4 | 1674.0 |
| 77.5° | 840.4  | 856.3  | 1270.8 | 1578.9 | 2269.8 | 2709.2 | 2532.5 | 2534.8 | 1859.8 | 1288.9 | 899.3  |
| 80°   | 534.6  | 539.1  | 770.2  | 910.6  | 1313.8 | 1628.7 | 1440.7 | 1171.1 | 838.1  | 684.1  | 536.9  |
| 82.5° | 310.3  | 303.5  | 459.8  | 514.2  | 625.2  | 618.4  | 511.9  | 484.8  | 367.0  | 342.1  | 274.1  |
| 85°   | 124.6  | 115.5  | 201.6  | 188.0  | 190.3  | 201.6  | 149.5  | 149.5  | 120.1  | 92.9   | 68.0   |
| 87.5° | 24.9   | 24.9   | 27.2   | 24.9   | 24.9   | 27.2   | 20.4   | 20.4   | 18.1   | 18.1   | 18.1   |
| 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°    | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 | 2482.7 |
| 2.5°  | 2464.6 | 2460.1 | 2448.7 | 2419.3 | 2403.4 | 2394.4 | 2380.8 | 2376.2 | 2374.0 | 2376.2 | 2383.0 |
| 5°    | 2471.4 | 2455.5 | 2423.8 | 2376.2 | 2344.5 | 2324.1 | 2301.5 | 2292.4 | 2285.6 | 2285.6 | 2292.4 |
| 7.5°  | 2475.9 | 2451.0 | 2396.6 | 2326.4 | 2281.1 | 2249.4 | 2222.2 | 2210.9 | 2208.6 | 2215.4 | 2217.7 |
| 10°   | 2478.2 | 2441.9 | 2364.9 | 2276.6 | 2217.7 | 2176.9 | 2149.7 | 2142.9 | 2149.7 | 2163.3 | 2165.6 |
| 12.5° | 2494.0 | 2444.2 | 2346.8 | 2242.6 | 2172.4 | 2131.6 | 2111.2 | 2111.2 | 2129.3 | 2154.2 | 2156.5 |
| 15°   | 2521.2 | 2460.1 | 2337.7 | 2215.4 | 2142.9 | 2106.7 | 2099.9 | 2111.2 | 2138.4 | 2176.9 | 2181.4 |
| 17.5° | 2541.6 | 2469.1 | 2317.3 | 2179.2 | 2104.4 | 2081.8 | 2093.1 | 2120.3 | 2158.8 | 2210.9 | 2215.4 |
| 20°   | 2555.2 | 2469.1 | 2287.9 | 2136.1 | 2065.9 | 2061.4 | 2093.1 | 2136.1 | 2176.9 | 2238.1 | 2244.9 |
| 22.5° | 2568.8 | 2464.6 | 2253.9 | 2084.0 | 2022.9 | 2036.5 | 2095.3 | 2149.7 | 2190.5 | 2256.2 | 2267.5 |
| 25°   | 2593.7 | 2471.4 | 2219.9 | 2031.9 | 1977.6 | 2016.1 | 2093.1 | 2158.8 | 2201.8 | 2269.8 | 2287.9 |
| 27.5° | 2627.7 | 2487.2 | 2195.0 | 1984.3 | 1932.2 | 1984.3 | 2077.2 | 2156.5 | 2201.8 | 2267.5 | 2287.9 |
| 30°   | 2663.9 | 2505.4 | 2165.6 | 1932.2 | 1880.1 | 1939.0 | 2043.2 | 2131.6 | 2183.7 | 2244.9 | 2269.8 |
| 32.5° | 2702.4 | 2525.7 | 2140.7 | 1875.6 | 1816.7 | 1877.9 | 1993.4 | 2093.1 | 2149.7 | 2206.3 | 2233.5 |
| 35°   | 2754.5 | 2562.0 | 2127.1 | 1830.3 | 1760.1 | 1814.5 | 1930.0 | 2043.2 | 2104.4 | 2156.5 | 2188.2 |
| 37.5° | 2818.0 | 2607.3 | 2120.3 | 1785.0 | 1698.9 | 1744.2 | 1862.0 | 1982.1 | 2047.8 | 2090.8 | 2120.3 |
| 40°   | 2890.4 | 2663.9 | 2118.0 | 1742.0 | 1637.8 | 1671.7 | 1791.8 | 1911.9 | 1975.3 | 2009.3 | 2034.2 |
| 42.5° | 2972.0 | 2727.3 | 2113.5 | 1698.9 | 1576.6 | 1603.8 | 1723.8 | 1841.6 | 1896.0 | 1925.5 | 1948.1 |
| 45°   | 3058.1 | 2790.8 | 2104.4 | 1646.8 | 1510.9 | 1542.6 | 1653.6 | 1757.8 | 1814.5 | 1839.4 | 1864.3 |
| 47.5° | 3144.2 | 2854.2 | 2086.3 | 1587.9 | 1452.0 | 1481.5 | 1578.9 | 1669.5 | 1714.8 | 1737.4 | 1762.4 |
| 50°   | 3228.0 | 2910.8 | 2043.2 | 1520.0 | 1390.9 | 1418.0 | 1492.8 | 1554.0 | 1587.9 | 1606.1 | 1631.0 |
| 52.5° | 3302.7 | 2949.3 | 1982.1 | 1440.7 | 1329.7 | 1343.3 | 1393.1 | 1445.2 | 1472.4 | 1474.7 | 1497.3 |
| 55°   | 3366.1 | 2969.7 | 1893.7 | 1359.1 | 1264.0 | 1266.3 | 1293.5 | 1334.2 | 1345.6 | 1336.5 | 1352.3 |
| 57.5° | 3402.4 | 2958.4 | 1796.3 | 1275.3 | 1196.0 | 1187.0 | 1207.4 | 1227.8 | 1230.0 | 1207.4 | 1223.2 |
| 60°   | 3411.5 | 2906.3 | 1669.5 | 1191.5 | 1128.1 | 1103.2 | 1110.0 | 1105.4 | 1100.9 | 1091.8 | 1105.4 |
| 62.5° | 3366.1 | 2795.3 | 1529.0 | 1110.0 | 1055.6 | 1017.1 | 1014.8 | 1012.6 | 1019.4 | 1021.6 | 1023.9 |
| 65°   | 3200.8 | 2586.9 | 1361.4 | 1026.2 | 978.6  | 926.5  | 924.2  | 951.4  | 960.5  | 946.9  | 951.4  |
| 67.5° | 2881.4 | 2267.5 | 1177.9 | 928.7  | 881.2  | 835.9  | 854.0  | 869.9  | 885.7  | 881.2  | 885.7  |
| 70°   | 2428.3 | 1862.0 | 1010.3 | 820.0  | 774.7  | 749.8  | 770.2  | 783.8  | 786.0  | 781.5  | 786.0  |
| 72.5° | 1909.6 | 1454.3 | 854.0  | 709.0  | 668.2  | 656.9  | 681.8  | 693.2  | 713.6  | 722.6  | 724.9  |
| 75°   | 1379.5 | 1073.7 | 700.0  | 589.0  | 555.0  | 555.0  | 577.6  | 598.0  | 616.1  | 604.8  | 598.0  |
| 77.5° | 770.2  | 641.1  | 502.9  | 405.5  | 412.3  | 444.0  | 453.0  | 475.7  | 493.8  | 491.6  | 487.0  |
| 80°   | 466.6  | 400.9  | 339.8  | 262.8  | 260.5  | 285.4  | 344.3  | 382.8  | 391.9  | 371.5  | 369.2  |
| 82.5° | 242.4  | 210.7  | 181.2  | 147.2  | 163.1  | 190.3  | 199.3  | 240.1  | 265.0  | 256.0  | 267.3  |
| 85°   | 61.2   | 58.9   | 65.7   | 68.0   | 83.8   | 92.9   | 101.9  | 120.1  | 79.3   | 38.5   | 38.5   |
| 87.5° | 18.1   | 18.1   | 22.7   | 22.7   | 29.4   | 36.2   | 34.0   | 34.0   | 18.1   | 2.3    | 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)