

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: P800180

Luminaire Tested: **ARCH2-80-740-U-T2U-HSS**

Issue Date: 4/4/2024

### Test Information

Test Method: LM-79-08  
Report Number: P800180  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-80-740-U-T2U-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 630mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II U  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 7734 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 84.3  
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



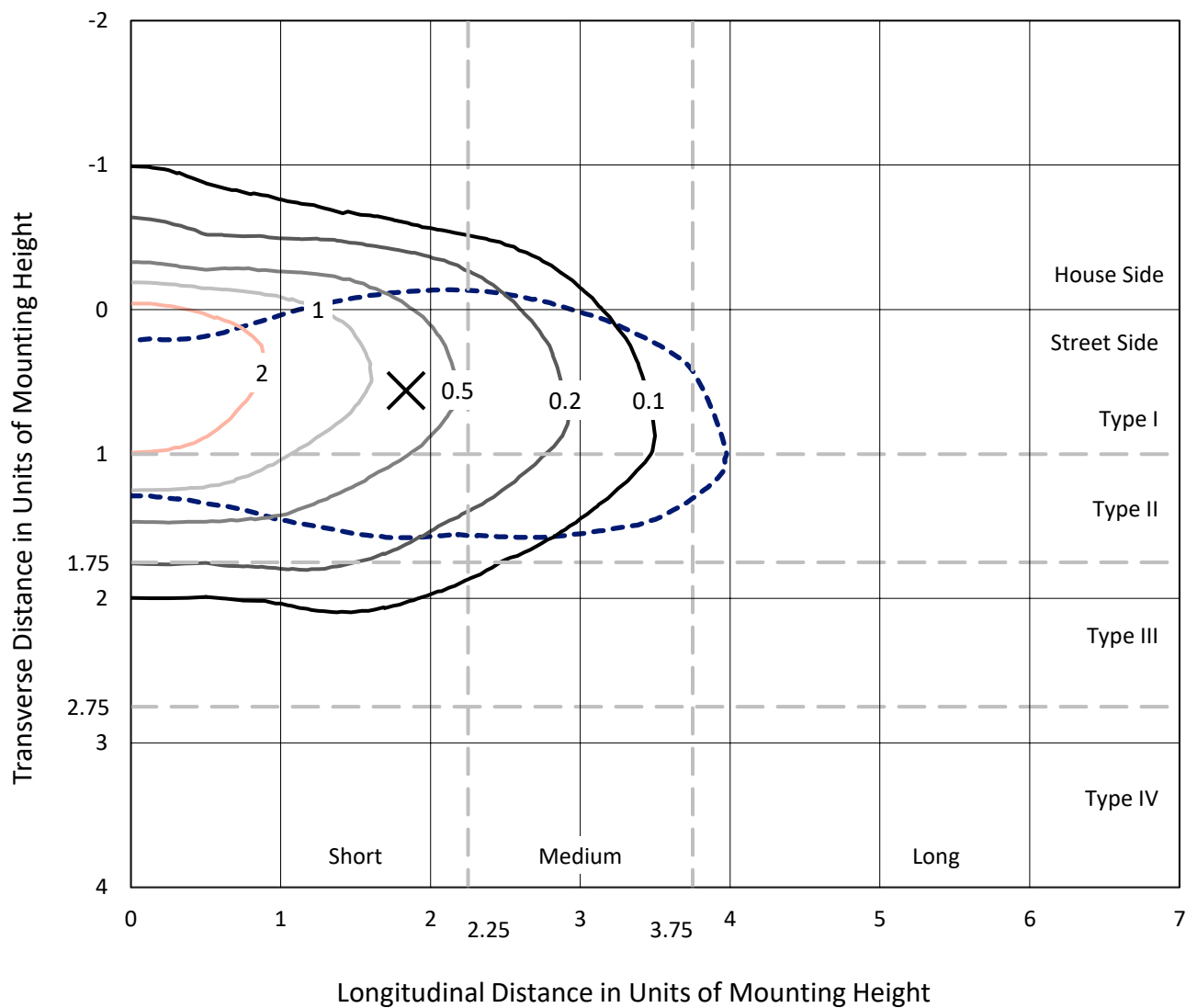
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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

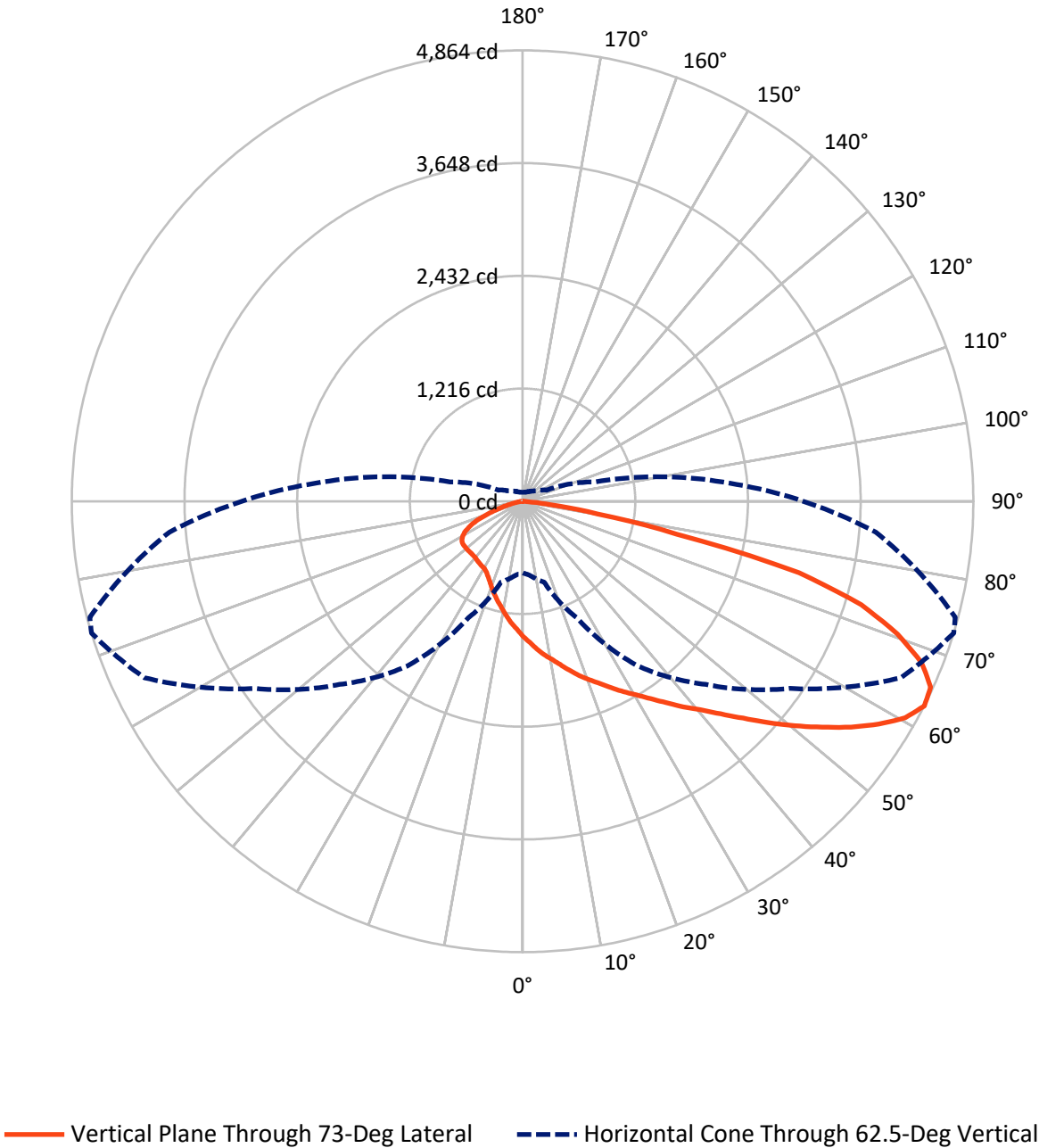
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
Type II - Short - N/A

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Luminous Intensity Polar Plot



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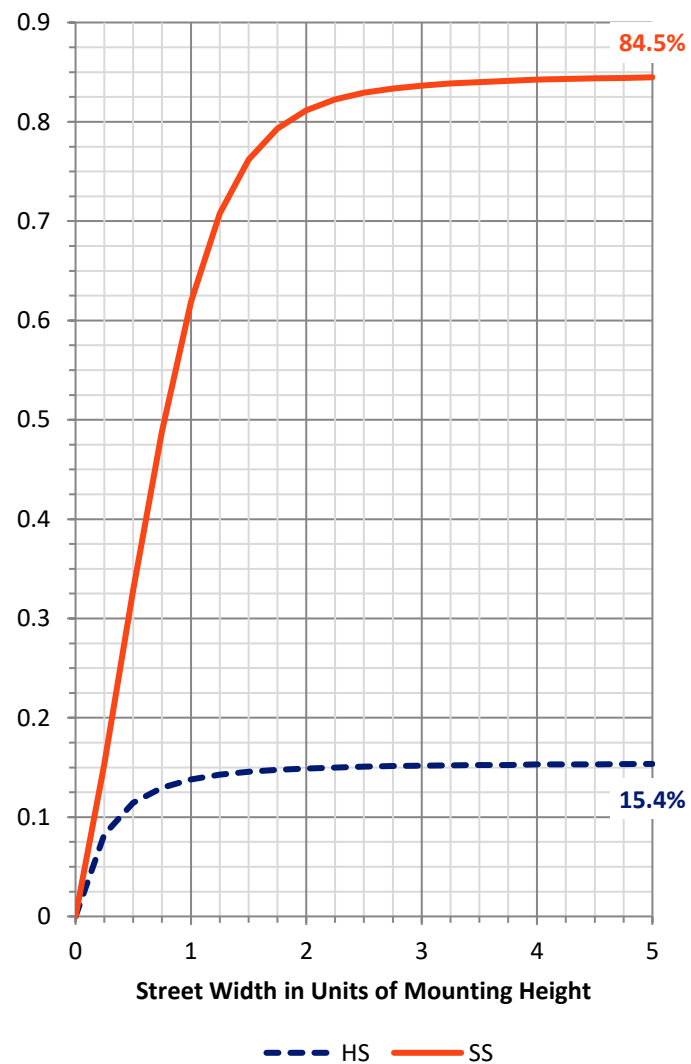
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1198.9   | 0.0    | 1198.9 |
|                    | % Fixture | 15.5     | 0.0    | 15.5   |
| <b>Street Side</b> | Lumens    | 6535.1   | 0.0    | 6535.1 |
|                    | % Fixture | 84.5     | 0.0    | 84.5   |
| <b>Total</b>       | Lumens    | 7734.0   | 0.0    | 7734.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 141.5  | 1.8       |
| 10°-20°   | 426.9  | 5.5       |
| 20°-30°   | 710.6  | 9.2       |
| 30°-40°   | 1072.2 | 13.9      |
| 40°-50°   | 1498.6 | 19.4      |
| 50°-60°   | 1655.3 | 21.4      |
| 60°-70°   | 1442.0 | 18.6      |
| 70°-80°   | 728.4  | 9.4       |
| 80°-90°   | 58.5   | 0.8       |
| 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°    | 7734.0 | 100.0     |
| 0°-180°   | 7734.0 | 100.0     |

**Coefficient of Utilization**



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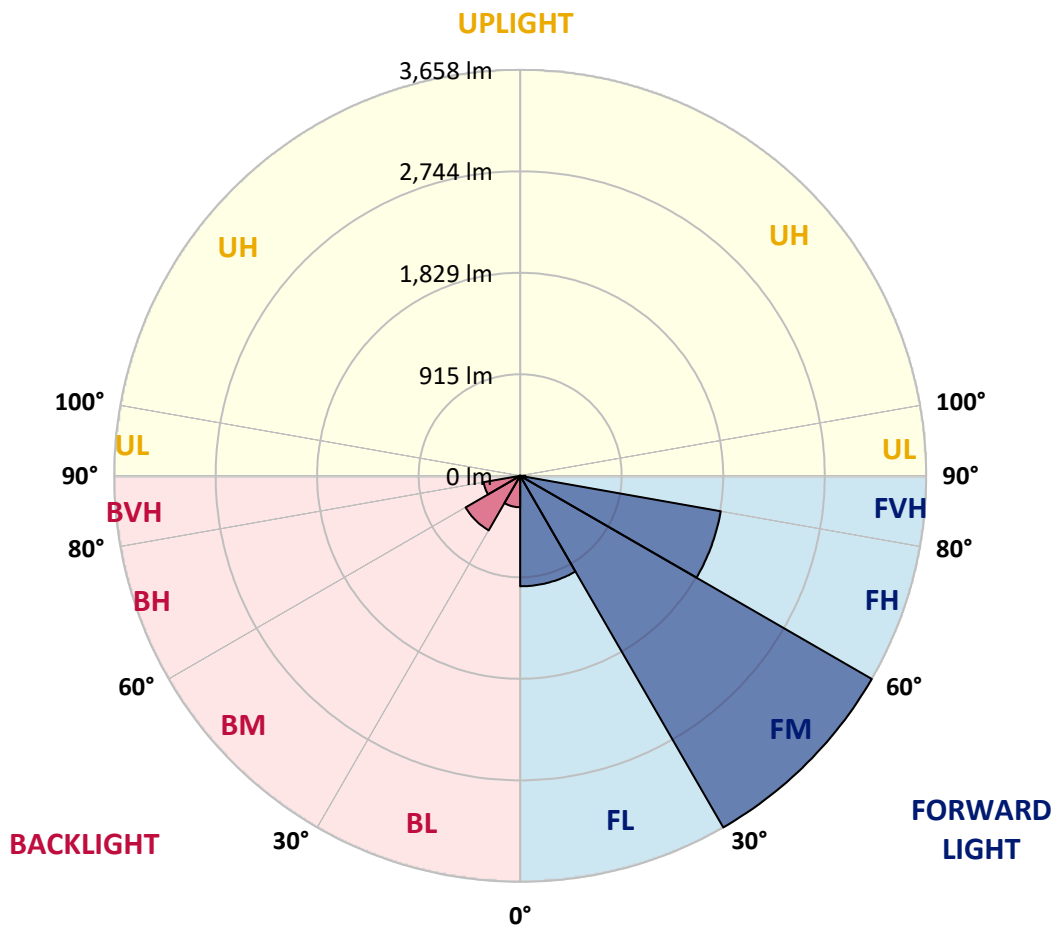
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 995.6  | 12.9      |                         |      |         |
| FM   | (30°-60°)   | 3658.5 | 47.3      |                         |      |         |
| FH   | (60°-80°)   | 1835.8 | 23.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 45.2   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 283.4  | 3.7       | B1/500                  |      |         |
| BM   | (30°-60°)   | 567.7  | 7.3       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 334.6  | 4.3       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 13.2   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 73°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 |
| 2.5°  | 1666.7 | 1685.2 | 1675.1 | 1681.8 | 1648.1 | 1626.2 | 1601.0 | 1552.1 | 1525.1 | 1521.7 | 1489.7 |
| 5°    | 1911.0 | 1931.3 | 1914.4 | 1909.3 | 1850.4 | 1799.8 | 1742.5 | 1656.6 | 1599.3 | 1589.2 | 1518.4 |
| 7.5°  | 2155.4 | 2173.9 | 2153.7 | 2138.5 | 2059.3 | 1970.0 | 1885.8 | 1759.4 | 1670.0 | 1653.2 | 1542.0 |
| 10°   | 2327.3 | 2344.1 | 2329.0 | 2313.8 | 2231.2 | 2140.2 | 2020.6 | 1855.4 | 1734.1 | 1707.1 | 1557.1 |
| 12.5° | 2457.0 | 2467.2 | 2460.4 | 2446.9 | 2369.4 | 2271.7 | 2157.1 | 1963.3 | 1806.5 | 1772.8 | 1580.7 |
| 15°   | 2563.2 | 2580.1 | 2571.6 | 2561.5 | 2487.4 | 2389.6 | 2280.1 | 2076.2 | 1890.8 | 1848.7 | 1616.1 |
| 17.5° | 2634.0 | 2645.8 | 2647.5 | 2647.5 | 2581.7 | 2485.7 | 2379.5 | 2179.0 | 1975.1 | 1921.1 | 1649.8 |
| 20°   | 2666.0 | 2679.5 | 2687.9 | 2701.4 | 2647.5 | 2564.9 | 2457.0 | 2266.6 | 2054.3 | 1993.6 | 1681.8 |
| 22.5° | 2681.2 | 2693.0 | 2714.9 | 2745.2 | 2701.4 | 2632.3 | 2532.9 | 2347.5 | 2133.5 | 2069.4 | 1718.9 |
| 25°   | 2693.0 | 2708.1 | 2740.2 | 2797.5 | 2767.1 | 2708.1 | 2622.2 | 2440.2 | 2227.9 | 2162.1 | 1772.8 |
| 27.5° | 2725.0 | 2743.5 | 2773.9 | 2843.0 | 2805.9 | 2777.2 | 2716.6 | 2539.6 | 2327.3 | 2259.9 | 1838.6 |
| 30°   | 2836.2 | 2851.4 | 2849.7 | 2893.5 | 2848.0 | 2839.6 | 2797.5 | 2635.7 | 2423.3 | 2355.9 | 1916.1 |
| 32.5° | 3038.4 | 3053.6 | 3016.5 | 2999.7 | 2900.2 | 2901.9 | 2885.1 | 2738.5 | 2537.9 | 2468.8 | 2005.4 |
| 35°   | 3255.8 | 3272.7 | 3223.8 | 3195.2 | 3028.3 | 2979.5 | 2987.9 | 2866.5 | 2666.0 | 2596.9 | 2116.6 |
| 37.5° | 3449.6 | 3469.9 | 3427.7 | 3385.6 | 3217.1 | 3104.2 | 3102.5 | 3009.8 | 2812.6 | 2741.8 | 2239.6 |
| 40°   | 3555.8 | 3579.4 | 3604.7 | 3581.1 | 3404.1 | 3279.4 | 3225.5 | 3156.4 | 2957.5 | 2885.1 | 2372.8 |
| 42.5° | 3606.4 | 3672.1 | 3717.6 | 3702.4 | 3557.5 | 3431.1 | 3367.1 | 3309.8 | 3134.5 | 3063.7 | 2531.2 |
| 45°   | 3464.8 | 3466.5 | 3562.5 | 3645.1 | 3618.2 | 3533.9 | 3522.1 | 3481.6 | 3336.7 | 3269.3 | 2709.8 |
| 47.5° | 3287.8 | 3274.4 | 3341.8 | 3488.4 | 3564.2 | 3586.1 | 3655.2 | 3672.1 | 3567.6 | 3500.2 | 2891.8 |
| 50°   | 2863.2 | 2871.6 | 3090.7 | 3301.3 | 3449.6 | 3591.2 | 3749.6 | 3867.6 | 3805.2 | 3741.2 | 3083.9 |
| 52.5° | 2329.0 | 2349.2 | 2600.3 | 3063.7 | 3298.0 | 3540.6 | 3805.2 | 4063.0 | 4047.9 | 3987.2 | 3276.1 |
| 55°   | 1867.2 | 1899.2 | 2165.5 | 2667.7 | 3104.2 | 3427.7 | 3828.8 | 4241.7 | 4299.0 | 4243.4 | 3464.8 |
| 57.5° | 1427.4 | 1461.1 | 1685.2 | 2200.9 | 2856.4 | 3244.0 | 3811.9 | 4398.4 | 4533.2 | 4497.8 | 3638.4 |
| 60°   | 1075.2 | 1108.9 | 1252.1 | 1784.6 | 2546.4 | 3038.4 | 3727.7 | 4501.2 | 4743.9 | 4706.8 | 3764.8 |
| 62.5° | 770.1  | 797.1  | 903.3  | 1388.6 | 2168.9 | 2794.1 | 3520.4 | 4502.9 | 4863.5 | 4833.2 | 3825.4 |
| 65°   | 554.4  | 554.4  | 640.4  | 990.9  | 1815.0 | 2500.9 | 3207.0 | 4295.6 | 4838.2 | 4829.8 | 3783.3 |
| 67.5° | 399.4  | 402.8  | 471.9  | 692.6  | 1447.6 | 2145.3 | 2800.8 | 3926.5 | 4642.8 | 4684.9 | 3631.6 |
| 70°   | 283.1  | 291.5  | 323.6  | 483.7  | 1093.7 | 1693.6 | 2366.0 | 3442.9 | 4290.5 | 4364.7 | 3338.4 |
| 72.5° | 219.1  | 224.1  | 246.0  | 337.0  | 798.8  | 1258.9 | 1885.8 | 2903.6 | 3820.4 | 3904.6 | 2939.0 |
| 75°   | 168.5  | 173.6  | 190.4  | 247.7  | 573.0  | 883.1  | 1339.7 | 2253.1 | 3080.6 | 3230.6 | 2361.0 |
| 77.5° | 123.0  | 129.8  | 141.6  | 180.3  | 333.7  | 561.2  | 812.3  | 1267.3 | 1700.4 | 1771.2 | 1236.9 |
| 80°   | 57.3   | 65.7   | 82.6   | 116.3  | 180.3  | 264.6  | 288.2  | 488.7  | 817.3  | 854.4  | 670.7  |
| 82.5° | 32.0   | 40.4   | 47.2   | 70.8   | 91.0   | 94.4   | 97.7   | 123.0  | 308.4  | 340.4  | 281.4  |
| 85°   | 15.2   | 20.2   | 21.9   | 30.3   | 30.3   | 27.0   | 32.0   | 23.6   | 50.6   | 60.7   | 59.0   |
| 87.5° | 0.0    | 1.7    | 3.4    | 8.4    | 6.7    | 5.1    | 5.1    | 5.1    | 5.1    | 6.7    | 5.1    |
| 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°    | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 | 1464.4 |
| 2.5°  | 1474.6 | 1452.7 | 1402.1 | 1358.3 | 1329.6 | 1304.4 | 1270.6 | 1255.5 | 1228.5 | 1233.6 | 1218.4 |
| 5°    | 1483.0 | 1442.5 | 1353.2 | 1270.6 | 1210.0 | 1156.1 | 1097.1 | 1063.4 | 1026.3 | 1022.9 | 1011.1 |
| 7.5°  | 1488.0 | 1425.7 | 1297.6 | 1181.3 | 1088.6 | 1006.1 | 926.9  | 883.1  | 837.6  | 827.4  | 817.3  |
| 10°   | 1483.0 | 1400.4 | 1240.3 | 1088.6 | 965.6  | 862.8  | 773.5  | 717.9  | 670.7  | 658.9  | 648.8  |
| 12.5° | 1488.0 | 1386.9 | 1186.4 | 1002.7 | 856.1  | 739.8  | 638.7  | 581.4  | 537.6  | 525.8  | 519.0  |
| 15°   | 1499.8 | 1378.5 | 1140.9 | 925.2  | 758.3  | 628.6  | 529.2  | 480.3  | 444.9  | 433.1  | 429.7  |
| 17.5° | 1510.0 | 1370.1 | 1092.0 | 849.3  | 660.6  | 530.8  | 444.9  | 404.5  | 374.1  | 362.3  | 359.0  |
| 20°   | 1523.4 | 1358.3 | 1043.1 | 776.9  | 574.7  | 453.3  | 377.5  | 342.1  | 318.5  | 310.1  | 308.4  |
| 22.5° | 1535.2 | 1349.9 | 997.6  | 704.4  | 495.5  | 391.0  | 326.9  | 298.3  | 281.4  | 273.0  | 273.0  |
| 25°   | 1565.6 | 1353.2 | 958.9  | 637.0  | 436.5  | 342.1  | 288.2  | 266.3  | 252.8  | 247.7  | 247.7  |
| 27.5° | 1601.0 | 1366.7 | 928.6  | 579.7  | 385.9  | 305.0  | 261.2  | 242.7  | 235.9  | 229.2  | 230.9  |
| 30°   | 1651.5 | 1393.7 | 908.3  | 532.5  | 348.8  | 276.4  | 239.3  | 225.8  | 219.1  | 217.4  | 217.4  |
| 32.5° | 1715.5 | 1437.5 | 906.6  | 502.2  | 321.9  | 254.5  | 224.1  | 212.3  | 209.0  | 207.3  | 207.3  |
| 35°   | 1791.4 | 1476.2 | 896.5  | 488.7  | 305.0  | 239.3  | 212.3  | 203.9  | 202.2  | 202.2  | 202.2  |
| 37.5° | 1882.4 | 1540.3 | 889.8  | 470.2  | 296.6  | 230.9  | 203.9  | 197.2  | 197.2  | 197.2  | 197.2  |
| 40°   | 1976.8 | 1592.5 | 879.7  | 453.3  | 293.2  | 225.8  | 198.9  | 190.4  | 190.4  | 190.4  | 190.4  |
| 42.5° | 2089.7 | 1668.4 | 876.3  | 444.9  | 288.2  | 222.4  | 192.1  | 182.0  | 183.7  | 183.7  | 185.4  |
| 45°   | 2226.2 | 1754.3 | 874.6  | 436.5  | 286.5  | 219.1  | 185.4  | 173.6  | 175.3  | 173.6  | 173.6  |
| 47.5° | 2364.4 | 1853.7 | 879.7  | 431.4  | 284.8  | 215.7  | 180.3  | 165.2  | 165.2  | 163.5  | 163.5  |
| 50°   | 2509.3 | 1944.7 | 883.1  | 426.4  | 281.4  | 209.0  | 171.9  | 158.4  | 155.0  | 151.7  | 153.4  |
| 52.5° | 2645.8 | 2029.0 | 884.7  | 417.9  | 271.3  | 198.9  | 165.2  | 150.0  | 144.9  | 139.9  | 141.6  |
| 55°   | 2782.3 | 2109.9 | 888.1  | 407.8  | 257.8  | 188.7  | 156.7  | 141.6  | 134.8  | 128.1  | 128.1  |
| 57.5° | 2905.3 | 2180.7 | 879.7  | 382.5  | 242.7  | 178.6  | 148.3  | 131.4  | 121.3  | 114.6  | 114.6  |
| 60°   | 2989.6 | 2231.2 | 854.4  | 345.5  | 222.4  | 166.8  | 139.9  | 121.3  | 109.5  | 104.5  | 104.5  |
| 62.5° | 3030.0 | 2239.6 | 808.9  | 284.8  | 197.2  | 155.0  | 129.8  | 111.2  | 101.1  | 97.7   | 97.7   |
| 65°   | 2991.3 | 2202.6 | 738.1  | 214.0  | 170.2  | 141.6  | 119.7  | 102.8  | 92.7   | 84.3   | 84.3   |
| 67.5° | 2856.4 | 2098.1 | 640.4  | 161.8  | 144.9  | 128.1  | 109.5  | 94.4   | 82.6   | 75.8   | 75.8   |
| 70°   | 2585.1 | 1880.7 | 495.5  | 129.8  | 123.0  | 111.2  | 99.4   | 84.3   | 74.1   | 65.7   | 65.7   |
| 72.5° | 2229.5 | 1594.2 | 348.8  | 104.5  | 104.5  | 94.4   | 84.3   | 74.1   | 64.0   | 57.3   | 57.3   |
| 75°   | 1710.5 | 1179.6 | 234.2  | 84.3   | 85.9   | 79.2   | 69.1   | 60.7   | 53.9   | 48.9   | 48.9   |
| 77.5° | 933.6  | 583.1  | 143.2  | 62.4   | 64.0   | 60.7   | 53.9   | 48.9   | 45.5   | 40.4   | 40.4   |
| 80°   | 453.3  | 256.2  | 82.6   | 43.8   | 45.5   | 43.8   | 40.4   | 35.4   | 35.4   | 32.0   | 32.0   |
| 82.5° | 190.4  | 96.1   | 43.8   | 30.3   | 30.3   | 27.0   | 25.3   | 25.3   | 25.3   | 23.6   | 23.6   |
| 85°   | 47.2   | 18.5   | 18.5   | 16.9   | 16.9   | 16.9   | 15.2   | 15.2   | 15.2   | 11.8   | 13.5   |
| 87.5° | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 5.1    | 1.7    | 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)